

passion for connections



Compact Catalog

Fresh Hinking

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.

Content



M8 and M12 Actuaror/Sensor Cordsets
Page 9



M8 and M12 Panel Mount Connectors
Page 65



M8 and M12 Passive Distribution Boxes
Page 83



High Power LED Lights

Page 115





Actuator/Sensor Cordsets

1210 ... 0...

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



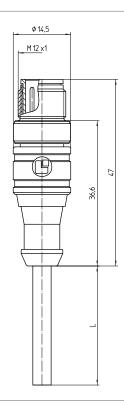


M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M12 male connector, straight,

A-coded

Cable end 2: blunt cut Cable: PVC, black



Pin Assignment

4 pole



- 1 = browr
- 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 \leq 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 mORated current at T_{amb} 40 °C 4 A Rated voltage 250 V AC/DC

Rated impulse voltage 2.50 kV

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

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

I (IEC)/0 (UL) (CTI=600)

³ specifications on page 125

Material group

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

1210 ... 3...

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



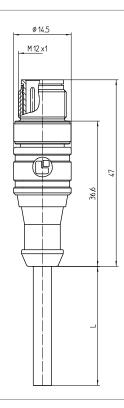


M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

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

1210 ... 3...

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 \leq 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 mORated 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)

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

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

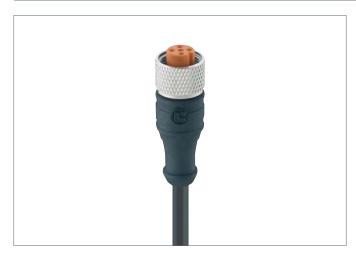
³ specifications on page 125

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

1200 ... 0...

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



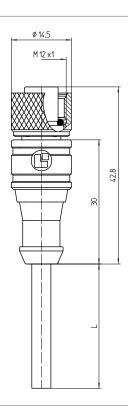


M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M12 female connector, straight,

A-coded

Cable end 2: blunt cut Cable: PVC, black



Pin Assignment

4 pole



- 1 = browr
- 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 mORated current at T_{amb} 40 °C 4 A 250 V AC/DC Rated voltage

Rated impulse voltage 2.50 kV

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

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

I (IEC)/0 (UL) (CTI=600)

³ specifications on page 125

Material group

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

1200 ... 3...

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



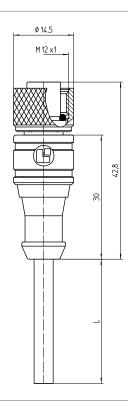


M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M12 female connector, straight,

A-coded

Cable end 2: blunt cut Cable: PUR, black



Pin Assignment

4 pole



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

1200 ... 3...

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 mORated 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 $> 100 \text{ M}\Omega$

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
		· ·	

1205 ... 0...

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



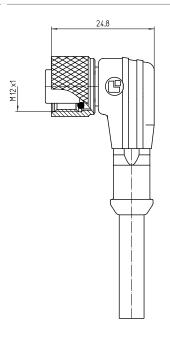


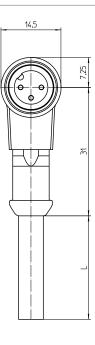


Cable end 1: M12 female connector, angled,

A-coded

Cable end 2: blunt cut Cable: PVC, black





Pin Assignment

4 pole

1 = brown2 = white

3 = blue

4 = black

5 pole

2 = white 3 = blue

4 = black 5 = green/yellow 8 pole

2 = brown3 = green

4 = yellow5 = gray

6 = pink7 = blue8 = 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 \leq 10 N (4 to 5 pole)

 \leq 23 N (8 pole)

Withdrawal force1 ≤ 15 N (4 to 5 pole)

≤ 30 N (8 pole)

Mating cycles ≥ 100 IP67 Protection degree²

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 mO

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)

I (IEC)/0 (UL) (CTI=600)

Pollution degree 3

Insulation resistance $> 100 \text{ M}\Omega$

¹ measured with a proper counterpart

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

Material group

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

1205 ... 3...

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

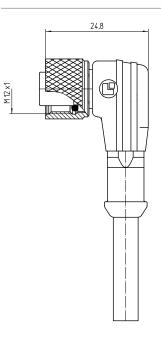


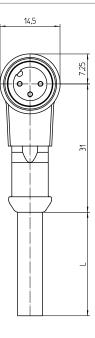




Cable end 1: M12 female connector, angled, A-coded

Cable end 2: blunt cut Cable: PUR, black





Pin Assignment

4 pole

1 = brown2 = white 3 = blue4 = black

5 pole

1 = brown2 = white 3 = blue

4 = black 5 = green/yellow 8 pole

2 = brown

3 = green4 = yellow5 = gray

6 = pink7 = blue8 = red

1 = brown2 = blue 3 = white

4 = green 5 = pink6 = vellow

7 = black 8 = gray

12 pole

9 = red10 = violet

11 = gray/pink 12 = red/blue

1205 ... 3...

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 \leq 10 N (4 to 5 pole)

 \leq 23 N (8 pole)

Withdrawal force1 ≤ 15 N (4 to 5 pole)

≤ 30 N (8 pole)

Mating cycles ≥ 100 IP67 Protection degree²

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)

20549 UL style

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ < 10 mO

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 $> 100 \text{ M}\Omega$

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

counterpart

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

1206 ... L1 0...

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



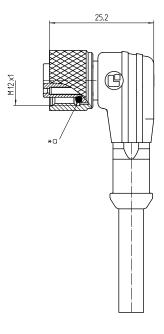


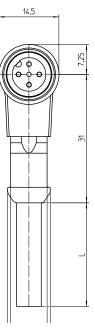
M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

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...

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 mORated current at T_{amb} 40 °C 4 A 10-30 V DC Rated voltage Rated impulse voltage 2.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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
1206 03 L1 001 5m	3	PVC, black	5

1206 ... L1 3...

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



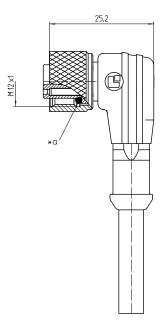


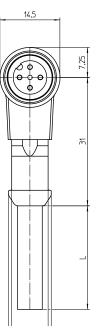
M12 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

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...

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 mORated current at T_{amb} 40 °C 4 A 10-30 V DC Rated voltage Rated impulse voltage 2.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

M12

1210 1200 ... 0...

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





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

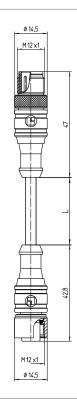
Cable end 1: M12 male connector, straight,

A-coded

Cable end 2: M12 female connector, straight,

A-coded

Cable: PVC, black



Pin Assignment

4 pole, male



4 pole, female





5 pole, male



5 pole, female



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



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

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 accor-

ding 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 mORated 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 $> 100 \text{ M}\Omega$

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

M12

1210 1200 ... 3...

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





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

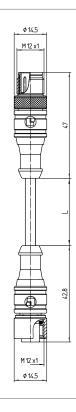
Cable end 1: M12 male connector, straight,

A-coded

Cable end 2: M12 female connector, straight,

A-coded

Cable: PUR, black



Pin Assignment

4 pole, male



4 pole, female





5 pole, male





5 pole, female

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



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

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 accor-

ding 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 mORated 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 $> 100 \text{ M}\Omega$

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

M12

1210 1205 ... 3...

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





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

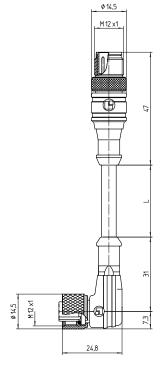
Cable end 1: M12 male connector, straight,

A-coded

Cable end 2: M12 female connector, angled,

A-coded

Cable: PUR, black



Pin Assignment

4 pole, male

4 pole, female





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

1210 1205 ... 3...

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 accor-

ding to IEC 61076-2-101

Connected Cable³

Cable jacket PUR

Cable no. 910301 (4 x 0.34 mm²)

More pole numbers and cable lengths on request.

UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ < 10 mORated current at T_{amb} 40 °C 4 A 250 V AC/DC Rated voltage

Rated impulse voltage 2.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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
-			

M12 1210 1206 ... L1 0...

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





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

25.2 LE EZ.

ø 14,5

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 accor-

ding 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 mORated current at T_{amb} 40 °C 4 A 10-30 V DC Rated voltage Rated impulse voltage 2.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart

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

M12 1210 1206 ... L1 3...

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





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

25.2 EE

ø 14,5 M 12 x1

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

 $\begin{tabular}{lll} Insertion force1 & $\leq 10 \ N$ \\ Withdrawal force1 & $\leq 15 \ N$ \\ Mating cycles & ≥ 100 \\ Protection degree2 & IP67 \\ \end{tabular}$

Mating connectors M12 male/female connectors accor-

ding 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
 \leq 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

Insulation resistance $> 100 \text{ M}\Omega$

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

M12·M8 1210 0800 ... 3...

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





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

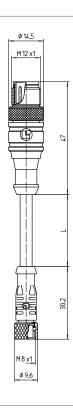
3 pole, male

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 \leq 10 N **(1210)**, \leq 23 N **(0800)** Withdrawal force¹ \leq 15 N **(1210)**, \leq 23 N **(0800)**

 $\label{eq:mating cycles} \mbox{Mating cycles} \qquad \qquad \geq 100$ $\mbox{Protection degree}^2 \qquad \qquad \mbox{IP67}$

Mating connectors M12 female connectors according to IEC 61076-2-101 and M8 male connec-

tors according to IEC 61076-2-104

Connected Cable²

Cable iacket PUR

Cable no. 910300 (3 x 0.34 mm²)

More pole numbers and cable lengths on request.

UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance \leq 10 m Ω 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 $> 100 \text{ M}\Omega$

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

M12·M8 1210 0806 ... L1 3...

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





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

d P 67

ø 14,5 M 12 x1

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 connec-

tors according to IEC 61076-2-104

Connected Cable³

Cable iacket PUR

Cable no. 910300 (3 x 0.34 mm²)

UL style 20549

Electrical Data (at T_{amb} 20 °C)

Contact resistance¹ < 10 mORated 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

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart

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

0810 ... 0...

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



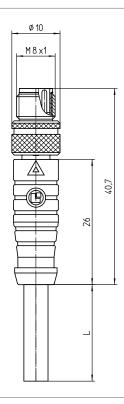


M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M8 male connector, straight,

A-coded

Cable end 2: blunt cut Cable: PVC, black



Pin Assignment



- 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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

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

³ specifications on page 125

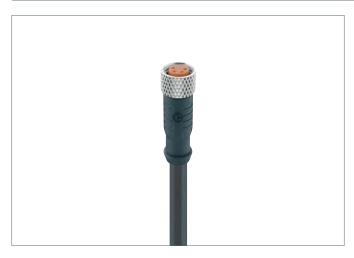
Designation	Poles	Cable	Cable Lengths [L] in m
0810 04 002 2m	4	PVC, black	2
0810 04 002 5m	4	PVC, black	5

M8

0800 ... 0...

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





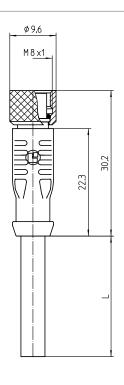
M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M8 female connector, straight,

A-coded

Cable end 2: blunt cut

Cable: PVC, black



Pin Assignment



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

M8

0800 ... 0...

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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

0800 ... 3...

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





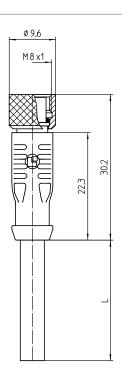
M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

Cable end 1: M8 female connector, straight,

A-coded

Cable end 2: blunt cut

Cable: PUR, black



Pin Assignment

3 pole





- 1 = brown
- 1 = brown
- 3 = blue
- 2 = white
- 4 = black
- 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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

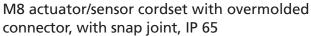
M8

0800F1 ... 0...

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



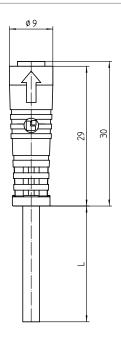




Cable end 1: M8 female connector, straight,

A-coded

Cable end 2: blunt cut Cable: PVC, black



Pin Assignment



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

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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

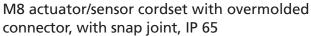
M8

0800F1 ... 3...

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



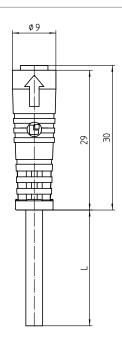




Cable end 1: M8 female connector, straight,

A-coded

Cable end 2: blunt cut Cable: PUR, black



Pin Assignment

3 pole

4 pole





1 = brown3 = blue

1 = brown

2 = white

4 = black

3 = blue

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 IP65 Protection degree²

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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

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

³ specifications on page 125

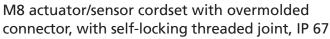
Designation	Poles	Cable	Cable Lengths [L] in m
0800F1 03 300 2m	3	PUR, black	2
0800F1 03 300 5m	3	PUR, black	5
0800F1 04 301 2m	4	PUR, black	2
0800F1 04 301 5m	4	PUR, black	5

0805 ... 0...

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



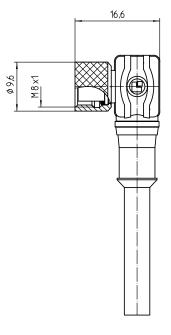


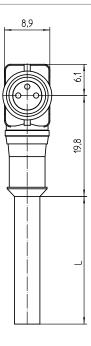


Cable end 1: M8 female connector, angled,

A-coded

Cable end 2: blunt cut Cable: PVC, black





Pin Assignment



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

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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

0806 ... L1 0...

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



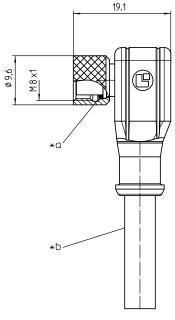


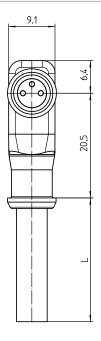
M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

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



- 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 NWithdrawal 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 mORated current at T_{amb} 40 °C 4 A 10-30 V DC Rated voltage Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

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

³ specifications on page 125

PVC, black	2
PVC, black	5
-	

0806 ... L1 3...

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

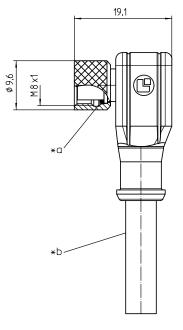


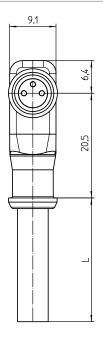


M8 actuator/sensor cordset with overmolded connector, with self-locking threaded joint, IP 67

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



- 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 mORated current at T_{amb} 40 °C 4 A 10-30 V DC Rated voltage Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

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

³ specifications on page 125

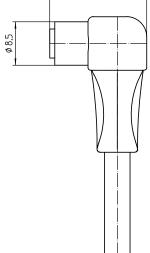
Designation	Poles	Cable	Cable Lengths [L] in m
0806 03 L1 300 2m	3	PUR, black	2
0806 03 L1 300 5m	3	PUR, black	5

0805F1... 0...

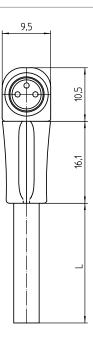
Actuator/sensor cordset **PVC**Single-ended with female connector
Snap joint, IP65







19



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



- 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 ≥ 100 Mating cycles IP65 Protection degree²

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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

3 Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

M8

0810 0800 ... 3...

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





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

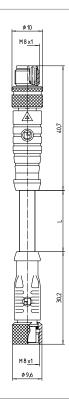
4 pole, male

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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

M8

0810 0805 ... 3...

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





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

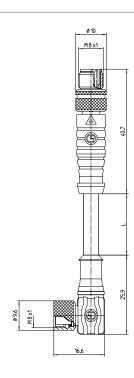
4 pole, male

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 mORated current at T_{amb} 40 °C 4 A

50 V AC/60 V DC Rated voltage

Rated impulse voltage 1.50 kV

Material group I (IEC)/0 (UL) (CTI=600)

Pollution degree

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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

M8

0810 0806 ... L1 3...

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





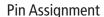
M8 actuator/sensor cordset with overmolded connectors, with self-locking threaded joint, IP 67

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

Cable end 2: M8 female connector, angled, with

LED L1, A-coded

Cable: PUR, black



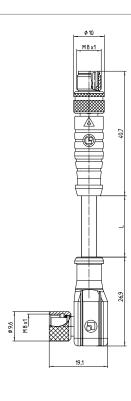
3 pole, male

3 pole, female





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



0810 0806 ... L1 3...

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

 $\begin{tabular}{ll} Insertion force1 & $\le 23 \ N$ \\ Withdrawal force1 & $\le 23 \ N$ \\ Mating cycles & ≥ 100 \\ Protection degree2 & IP67 \\ \end{tabular}$

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
 \leq 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 $> 100 \text{ M}\Omega$

¹ measured with a proper counterpart

³ specifications on page 125

Poles	Cable	Cable Lengths [L] in m
3	PUR, black	0.3
3	PUR, black	1
3	PUR, black	2
3	PUR, black	5
	Poles 3 3 3 3 3	3 PUR, black 3 PUR, black 3 PUR, black

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





Panel Mount Connectors

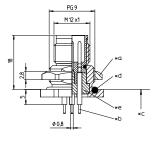
1231 ... T9CP

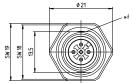
Panel mount connector Rear side mounting Thread PG9, IP 67

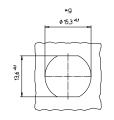




M12 panel mount connector, male, A-coded, IP67, for rear side mounting, thread PG9, for printed circuit boards







- *a nut
- *b solder pin for bore hole in printed circuit board Ø 1.2
- *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











1231 ... T9CP

M12

Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body РΑ

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 \leq 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 Pollution degree 3

Insulation resistance > 100 MO.

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

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		

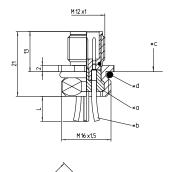
More pole numbers on request.

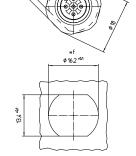
Panel mount connector Front mounting Thread M16, IP 67





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
- O-ring gasket
- *e anti-rotation
- port in mounting plate

Pin Assignment



1 = brown

2 = white

3 = blue4 = 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 РΑ

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 \leq 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 Pollution degree 3

Insulation resistance > 100 MO.

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

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.

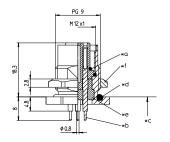
1221 ... T9CP

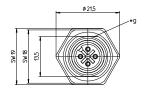
Panel mount connector Rear side mounting Thread PG9, IP 67

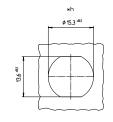




M12 panel mount connector, female, A-coded, IP67, for rear side mounting, thread PG9, for printed circuit boards







- *a O-ring gasket
- *b solder pin for bore hole in printed circuit board Ø 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











Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body РΑ

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 \leq 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 Pollution degree 3

Insulation resistance > 100 MO.

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

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		

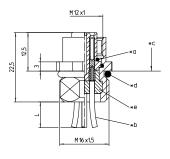
More pole numbers on request.

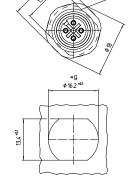
Panel mount connector Front mounting Thread M16, IP 67





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
- 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

1 = white 2 = brown3 = green4 = yellow

8 pole

5 = gray

6 = pink

7 = blue

8 = red

1220 ... T16CW ...

M12

Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body РΑ

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 \leq 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 Pollution degree 3

Insulation resistance > 100 MO.

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

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.

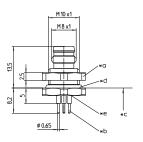
0831 ... T10CP

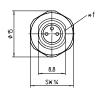
Panel mount connector Rear side mounting Thread M10, IP 67





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







- *a nu
- *b solder pin for bore hole in printed circuit board Ø 0.8
- *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 -25 °C/+80 °C

Materials

Insulating body РΑ

CuZn, pre-nickel and gold-plated Contact pin

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

Insulation resistance $> 100 \text{ M}\Omega$

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.

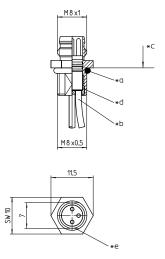
0830 ... T8CW ...

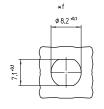
Panel mount connector Front mounting Thread M8, IP 67





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

4 pole





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

0830 ... T8CW ...

M8

Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body РΑ

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

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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.

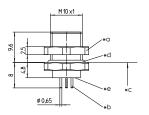
0821 ... T10CP

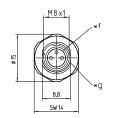
Panel mount connector Rear side mounting Thread M10, IP 67





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 Ø 0.8
- *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 -25 °C/+80 °C

Materials

Insulating body РΑ

CuZn, pre-nickel and gold-plated Contact bush

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

Insulation resistance $> 100 \text{ M}\Omega$

 $^{^{\}rm 1}$ measured with a proper counterpart $^{\rm 2}$ 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.

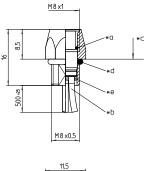
0820 ... T8CW ...

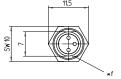
Panel mount connector Front mounting Thread M8, IP 67

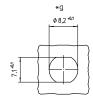




M8 panel mount connector, female, A-coded, IP67, for front mounting, thread M8, with stranded wires







- *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

4 pole





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

0820 ... T8CW ...

M8

Temperature Range

Temperature range -25 °C/+80 °C

Materials

Insulating body РΑ

CuZn, pre-nickel and gold-plated Contact bush

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 \leq 10 m Ω 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

Insulation resistance $> 100 \text{ M}\Omega$

measured with a proper counterpart 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.

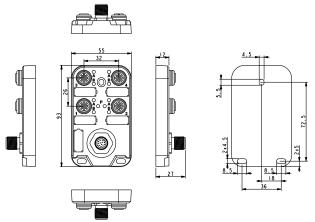




Passive Distribution Boxes







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

Main connection: M12

Pin Assignment

4 pole



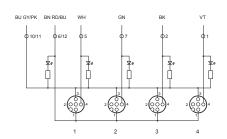
1 = +

2 = not con.

3 = -

4 = S1

5 = PE





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)

 $\hspace{.1in} \text{Contact resistance} \hspace{.1in} \leq 5 \hspace{.1in} \text{m} \Omega$

Nominal current \leq 1.5 A per port

 \leq 4.5 A per port

Nominal voltage 10–30 V DC (24 V DC)

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

 $^{^{\}rm 1}$ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

5512 04DL1

Actuator/Sensor distribution boxes





555

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

Main connection: M12

Pin Assignment

5 pole



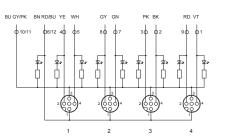
1 = +

2 = S2

3 – –

4 = S1

5 = PE





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)

 ${\hbox{Contact resistance}} \qquad \qquad \leq 5 \ m\Omega$

Nominal current \leq 1.5 A per port

 \leq 4.5 A per port

Nominal voltage 10–30 V DC (24 V DC)

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

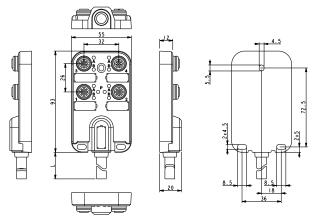
 $^{^{\}rm 1}$ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

5500 04L1 3...

Actuator/Sensor distribution boxes







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

Main connection: Cable, PUR, gray

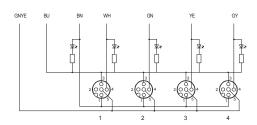
Pin Assignment

4 pole



4 = S1

5 = PE



5500 04L1 3...

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

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)

 $\begin{array}{ll} \mbox{Contact resistance} & \leq 5 \ \mbox{m} \Omega \\ \mbox{Nominal current} & \leq 2 \ \mbox{A per port} \end{array}$

 \leq 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
- ² specifications on page 125

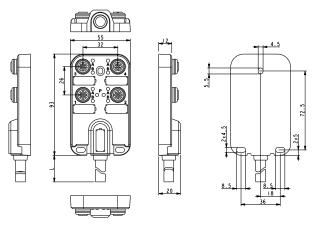
Designation	Poles	Cable	Cable Lengths [L] in m
5500 04L1 311 5m	4 x 4	PUR, gray	5
5500 04L1 311 10m	4 x 4	PUR, gray	10

5500 04DL1 3...

Actuator/Sensor distribution boxes







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

Main connection: Cable, PUR, gray

Pin Assignment

5 pole



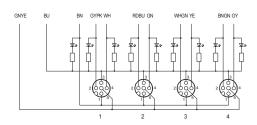
1 = +

2 = S2

2 32

4 = S1

5 = PE



5500 04DL1 3...

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

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 $\leq 5 \text{ m}\Omega$ Nominal current $\leq 2 \text{ A per port}$

≤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
- ² specifications on page 125

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





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

Main connection: M12

Pin Assignment

4 pole



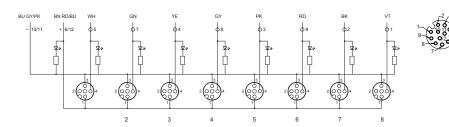
1 = +

2 = not con

3 = -

4 = S1

5 = PE



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)

 $\hspace{.1in} \text{Contact resistance} \hspace{.1in} \leq 5 \hspace{.1in} \text{m} \Omega$

Nominal current \leq 1.5 A per port

 \leq 4.5 A per port

Nominal voltage 10–30 V DC (24 V DC)

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

 $^{^{\}rm 1}$ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

CE | c Sus [pending]



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

Main connection: Cable, PUR, gray

Pin Assignment

4 pole



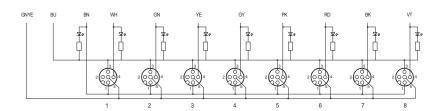
1 = +

2 = not con

3 = -

4 = S1

5 = PE



5500 08L1 3...

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

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)

 $\begin{array}{ll} \mbox{Contact resistance} & \leq 5 \mbox{ m} \Omega \\ \mbox{Nominal current} & \leq 2 \mbox{ A per port} \end{array}$

 \leq 8 A per port

Nominal voltage 10–30 V DC (24 V DC)

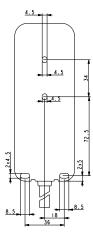
- ¹ according to IEC DIN EN 60529, only in locked condition with an appropriate
- ² specifications on page 125

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





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



Main connection: Cable, PUR, gray

Pin Assignment

5 pole



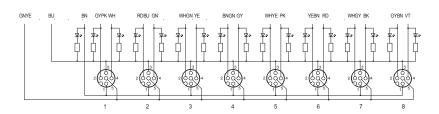
1 = +

2 = 52

2 32

/I - C1

5 = PE



5500 08DL1 3...

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

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)

 $\begin{array}{ll} \mbox{Contact resistance} & \leq 5 \mbox{ m} \Omega \\ \mbox{Nominal current} & \leq 2 \mbox{ A per port} \\ \end{array}$

 \leq 8 A per port

Nominal voltage 10–30 V DC (24 V DC)

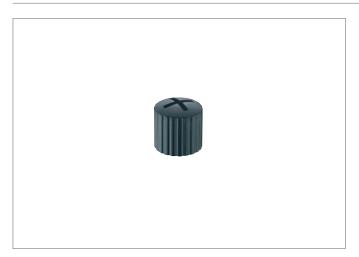
¹ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

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

9912 CPM0

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

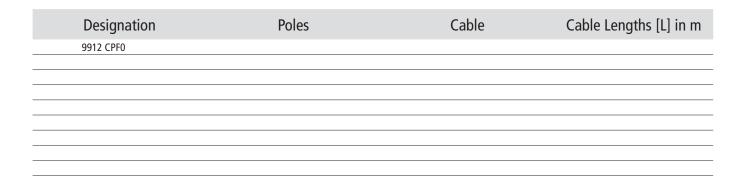
Cap

PC/ABS

Mechanical Data

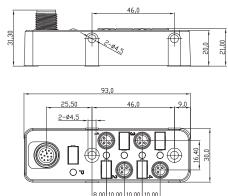
Protection degree

IP67









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

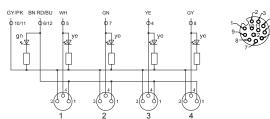
Main connection: M12

Pin Assignment

3 pole



4 = S1





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)

 $\begin{array}{ll} \text{Contact resistance} & \leq 5 \text{ m}\Omega \\ \text{Nominal current} & \leq 1.5 \text{ A per port} \\ \end{array}$

 \leq 4.5 A per port

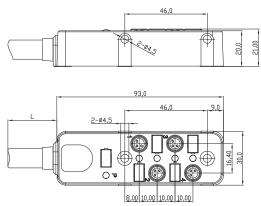
Nominal voltage 10–30 V DC (24 V DC)

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

 $^{^{\}rm 1}$ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart







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

Main connection: Cable, PUR, gray

Pin Assignment

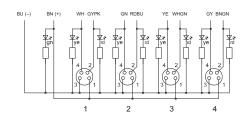
3 pole



1 .

3 = -

4 = S1



N // O

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)

 $\begin{array}{ll} \mbox{Contact resistance} & \leq 5 \mbox{ m} \Omega \\ \mbox{Nominal current} & \leq 2 \mbox{ A per port} \\ \end{array}$

≤ 8 A per port

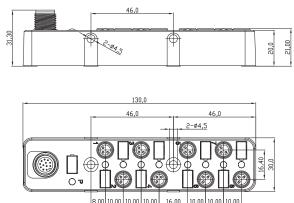
Nominal voltage 10–30 V DC (24 V DC)

- 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







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

Main connection: M12

Pin Assignment

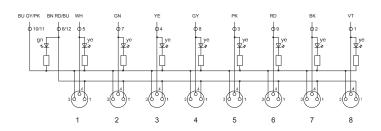
3 pole



1 = +

3 = -

4 = S1





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)

 $\begin{array}{ll} \mbox{Contact resistance} & \leq 5 \ \mbox{m} \Omega \\ \mbox{Nominal current} & \leq 1.5 \ \mbox{A per port} \end{array}$

 \leq 4.5 A per port

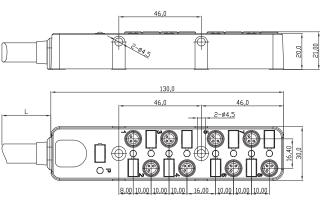
Nominal voltage 10–30 V DC (24 V DC)

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

 $^{^{\}rm 1}$ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart







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

Main connection: Cable, PUR, gray

Pin Assignment

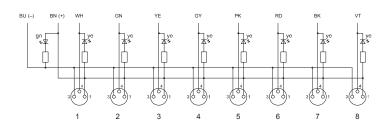
3 pole



1 = +

3 = -

4 = S1



. . .

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)

 $\begin{array}{ll} \mbox{Contact resistance} & \leq 5 \ \mbox{m} \Omega \\ \mbox{Nominal current} & \leq 2 \ \mbox{A per port} \end{array}$

≤ 8 A per port

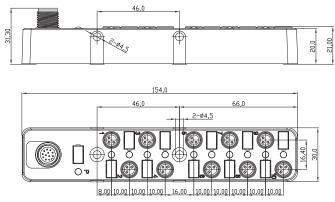
Nominal voltage 10–30 V DC (24 V DC)

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







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

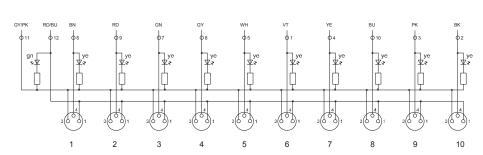
Main connection: M12

Pin Assignment Wiring diagram

3 pole







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)

 $\begin{tabular}{lll} Contact resistance & $\leq 5 \ m\Omega$ \\ Nominal current & $\leq 1.5 \ A \ per \ port \end{tabular}$

 \leq 4.5 A per port

Nominal voltage 10–30 V DC (24 V DC)

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

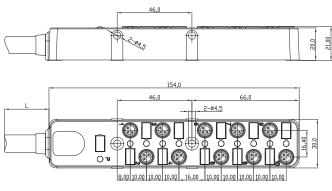
More pole numbers and cable lengths on request.

 $^{^{\}rm 1}$ according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Actuator/Sensor distribution boxes







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

Main connection: Cable, PUR, gray

Pin Assignment

3 pole

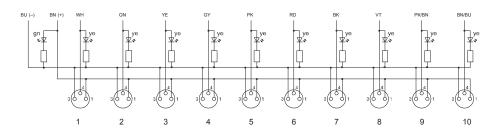


1 = +

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)

 $\begin{array}{ll} \text{Contact resistance} & \leq 5 \text{ m}\Omega \\ \text{Nominal current} & \leq 2 \text{ A per port} \\ \end{array}$

≤ 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
- 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.

9908 CPM0

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

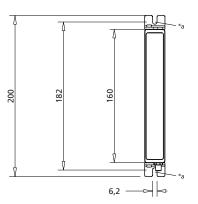
6157 8055 S01 4W

High-power LED lights

 ϵ



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

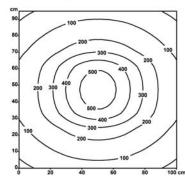




- *a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
- *b hinged fixation

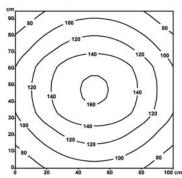
Illuminance with measuring distance 50 cm

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 S01 4W

Temperature Range

Temperature range ≤ 50 °C

Materials

Housing aluminum, anodized
Lamp cover tempered glass, frosted

Mechanical Data

Protection degree IP67
Weight ca. 180 g

Mating connectors M8 female connectors acc. to

IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Power consumption 4 V

Connected load 24 V DC (-10 %/+15 %)

Nominal currect 0.17 A
Appliance class III

Associated products

Illuminant LED, energy efficieny class A+

Luminaire luminous fluxca. 420 lmLuminaire luminous efficacyca. 105 lm/WLight colordaylight whiteColor temperatureca. 5.500 KColor rendering index> 80

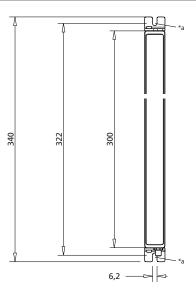
Designation	Poles	Cable	Cable Lengths [L] in m
6157 8055 S01 4W			
-			

High-power LED lights

 ϵ



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

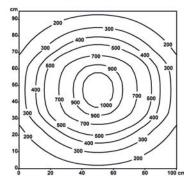




- *a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
- *b hinged fixation

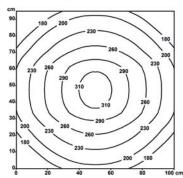
Illuminance with measuring distance 50 cm

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 S03 8W

Temperature Range

Temperature range ≤ 50 °C

Materials

Housing aluminum, anodized
Lamp cover tempered glass, frosted

Mechanical Data

Protection degree IP67
Weight ca. 300 g

Mating connectors M8 female connectors acc. to

IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Power consumption 8

Connected load 24 V DC (-10 %/+15 %)

Nominal currect 0.33 A
Appliance class III

Associated products

Illuminant LED, energy efficieny class A+

Luminaire luminous fluxca. 840 lmLuminaire luminous efficacyca. 105 lm/WLight colordaylight whiteColor temperatureca. 5.500 KColor rendering index> 80

Designation	Poles	Cable	Cable Lengths [L] in m
6157 8055 S03 8W			

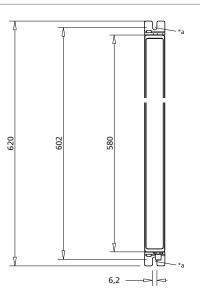
6157 8055 S06 16W

High-power LED lights

 ϵ



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

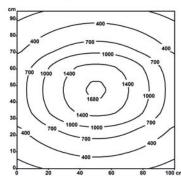




- *a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
- *b hinged fixation

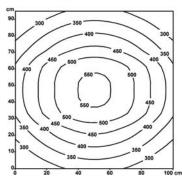
Illuminance with measuring distance 50 cm

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 currect 0.67 A Appliance class III

Associated products

Illuminant LED, energy efficieny class A+

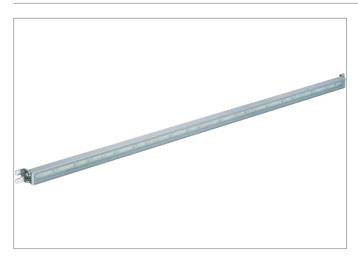
Luminaire luminous fluxca. 1.680 lmLuminaire luminous efficacyca. 105 lm/WLight colordaylight whiteColor temperatureca. 5.500 KColor rendering index> 80

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

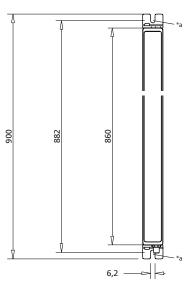
6157 8055 S09 24W

High-power LED lights

 ϵ



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

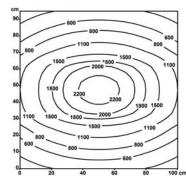




- *a for fixation by means of screws M5 or M6, max. bolt head diameter 12 mm
- *b hinged fixation

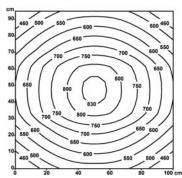
Illuminance with measuring distance 50 cm

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



6157 8055 S09 24W

Temperature Range

Temperature range ≤ 50 °C

Materials

Housing aluminum, anodized
Lamp cover tempered glass, frosted

Mechanical Data

Protection degree IP67
Weight ca. 800 g

Mating connectors M8 female connectors acc. to

IEC 61076-2-104

Electrical Data (at T_{amb} 20 °C)

Power consumption 24 W

Connected load 24 V DC (-10 %/+15 %)

Nominal currect 1 A Appliance class III

Associated products

Illuminant LED, energy efficieny class A+

Luminaire luminous fluxca. 2.520 lmLuminaire luminous efficacyca. 105 lm/WLight colordaylight whiteColor temperatureca. 5.500 KColor rendering index> 80

Designation	Poles	Cable	Cable Lengths [L] in m
6157 8055 S09 24W			

Cable Specifications

				_		Constru	uction	
Code	Cable No.	Cable Type	UL Style	Approvals		A = Conductor	Single Core	
Couc	Cabic Hor	cable type	o z o cy.c	, ipprovais		B = Insulation	Conductor	
						C = Jacket D = Wrapping		Surface
001	910001	LiYY	2464	cULus	3 0	0 8 8	42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
002	910002	LiYY	2464	cULus	3 2		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	3 0		42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
301	910 <mark>301</mark>	Li9YH-11YH	20549	cULus	3 2		42 x 0.10 mm = 0.34 mm ² (AWG 22)	blank
302	910301	Li9YH-11YH	20549	cULus	5 0 3	© B &	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

	Single Core Insulation				J	acket		Remarks	Code
Material		Colors	Shielding	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

					Construction	
Code	Cable No.	Cable Type	UL Style	Approvals	Single Core	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1		Conductor	
					Construction	Surface
307	910307	Li9YH-11YH	20549	cULus	$44 \times 0.08 \text{ mm} = 0.25 \text{ mm}^2 \text{ (AWG 2 100 x 0.08 mm} = 0.50 \text{ mm}^2 \text{ (AWG 2 2 100 x 0.08 mm})$	
308	910308	Li9YH-11YH	20549	cULus	44 x 0.08 mm = 0.25 mm ² (AWG 2 100 x 0.08 mm = 0.50 mm ² (AWG 2	4) 1) blank
311	910311	Li9YH-11YH	20549	cULus	65 x 0.08 mm = 0.34 mm ² (AWG 2 150 x 0.08 mm = 0.75 mm ² (AWG 2	2) 0) blank
312	910312	Li9YH-11YH	20549	cULus	$65 \times 0.08 \text{ mm} = 0.34 \text{ mm}^2 \text{ (AWG 2 150 \times 0.08 mm} = 0.75 \text{ mm}^2 \text{ (AWG 2 150 \times 0.08 mm} = 0.75 \text{ mm}^2 \text{ (AWG 2 150 \text{ mm})} = 0.75 \text{ mm}^2 (AWG 2 150 \text{$	2) blank
313	910313	Li9YH-11YH	20549	cULus	65 x 0.08 mm = 0.34 mm ² (AWG 2 150 x 0.08 mm = 0.75 mm ² (AWG 2	2) 0) blank
314	910314	Li9YH-11YH	20549	cULus	65 x 0.08 mm = 0.34 mm ² (AWG 2 150 x 0.08 mm = 0.75 mm ² (AWG 2	2) 0) blank
315	910315	Li9YH-11YH	20549	cULus	32 x 0.10 mm = 0.25 mm ² (AWG 2	4) blank
317	910317	Li9YH-11YH	20549	cULus	44 x 0.08 mm = 0.25 mm ² (AWG 2 100 x 0.08 mm = 0.50 mm ² (AWG 2	4) blank

		ngle Core sulation	Shiel-		J.	Remarks	Code		
Material	Ø	Colors	ding	Material	Ø	Surface	Color		
PP	1.25 ±0.10 mm 1.60 ±0.10 mm	white/green/yellow/gray (0.22 mm²) brown/black (0.50 mm²)	-	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 mm²) brown/black (0.50 mm²)	-	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 mm²) brown/blue/green/yellow (0.75 mm²)	-	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 mm²) blue/brown/green-yellow (0.75 mm²)	-	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 mm²) yellow/green/brown/blue (0.75 mm²)	_	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 mm²) brown/blue/yellow/green (0.75 mm²)	-	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 mm²) brown/blue (0.50 mm²)	-	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 (mm²)
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 protecion)

8

(ADE	X	DEGREE OF PROTECTION	INDEX	DEGREE OF PROTECTION
0	A CONTRACTOR OF THE PARTY OF TH	No protection against accidental contact, no protection against solid foreign bodies	0	No protection against water
1	×2×	Protection against contact with any large area by hand and against solid foreign bodies with Ø > 50 mm	1	Protection against vertical water drips
2		Protection against contact with the fingers, protection against solid foreign bodies with Ø > 12 mm	2	Protection against diagonal water drips (up to a 15° angle)
3		Protection against tools, wires or similar objects with $\emptyset > 2.5$ mm, protection against solid foreign bodies with $\emptyset > 2.5$ mm	3	Protection against diagonal water drips (up to a 60° angle)
4 -		As 3, however Ø > 1 mm	4	Protection against water (out of a nozzle) from all directions
5		Full protection against contact, protection against interior injurious dust deposits	5	Full protection against contact, protection against interior injurious dust deposits
6		Total protection against contact, protection against penetration of dust	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 manufacture
			9	Protected against close-range high pressure high temperature spray downs



www.lutronic.biz · sales@lutronic.biz