

LED lamps for the cabinet

- Energy-saving (LED technology)
- Power consumption 5 W
- Luminous flux equivalent to a 95 W incandescent bulb
- Magnetic, screw or clip fixing
- With ON/OFF switch or motion sensor
- Wide voltage range by integrated power supply (20...60)V DC or (90...265)V AC
- Connected with AC/DC-coded cable
- Up to max. 10 lamps can be daisy chained by coded cables
- Long service life, maintenance free
- Extensive accessories:
 - Preassembled connection cables with plugs or sockets
 - Loose plugs or sockets for assembly
 - Door contact switch for the cabinet

7L.10.x.xxx.0005



- With magnetic fixing
- With ON/OFF switch

7L.11.x.xxx.0005

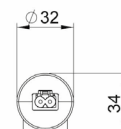
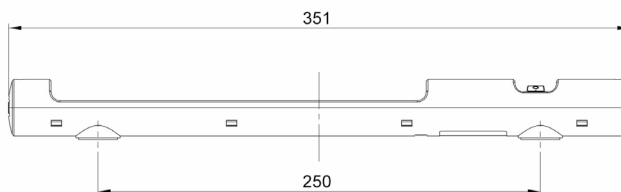


- With screw fixing
- With ON/OFF switch

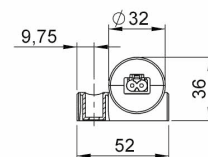
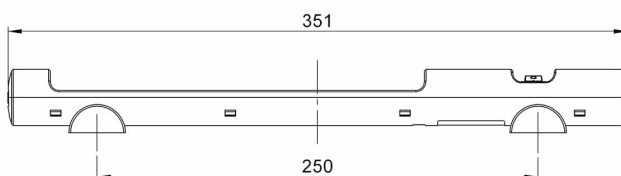
7L.14.x.xxx.0005



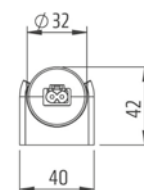
- With clip fixing
- With ON/OFF switch



with magnetic fixing and ON/OFF switch



with screw fixing and ON/OFF switch



with clip fixing and ON/OFF switch

* Due to the components in the lamp, the permissible continuous current is limited to 2.5 A.

Lamp Data

Type of lamp	LED, viewing angle 120°, Light colour: daylight white, colour temperature: 6000 - 7000 K	
Luminous flux	lm	400 at 120° (equivalent to 1200 lm at 360° or a 95 W incandescent bulb)
Life time	h	60000

Electrical Data

Operating voltage	V AC (50/60 Hz)/V DC	100...240/24...48
Operating range	V AC/V DC	90...265/20...60
Nominal current (plugs, sockets)	A	max. 2.5* (at max. 265 V AC or at 60 V DC)
Rated power of the lamp	W	max. 5

General data

Electrical connection	2-pole plug-in connection with interlock	
Connection cable to the lamp	Sheathed cable 2 x 1.5 mm ² , flexible, 2.0 m long, with plug	
Interconnectors from lamp to lamp	Sheathed cable 2 x 1.5 mm ² , flexible, 1.0 m long, with plug and socket	
Socket and plug	2-pole, colour: white (AC), blue (DC), with interlock	
Type of mounting	Magnetic- or screw fixing (M5 screw) or clip fixing (M6 screw, slot: 13 mm)	
Housing	Plastic, transparent	
Ambient temperature	°C	-30...+60
Protection class	II (Isolation protected)	
Protection category	IP20	

Approvals (according to type)



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 - Door contact switch for the cabinet

7L.12.x.xxx.0005

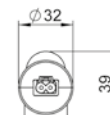
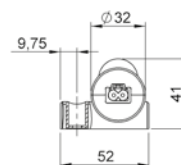
- With magnetic fixing
- With motion sensor

7L.13.x.xxx.0005

- With screw fixing
- With motion sensor

7L.15.x.xxx.0005

- With clip fixing
- With motion sensor

with magnetic fixing
and motion sensorwith screw fixing and
motion sensorwith clip fixing and
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Rated power of the lamp	W	max. 5

General data

Time to switch OFF the LED lamp	min	5 (fixed)
Sensing area (motion sensor)	m	approx. 2
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Protection category	IP20	
Approvals (according to type)		

Ordering information

Example: Series 7L, LED light with magnetic fixing and ON/OFF switch, supply voltage 230 V AC.

7 L . 1 0 . 8 . 2 3 0 . 0 0 0 5

Series

Type

- 10 = LED lamp with magnetic fixing and ON/OFF switch
- 11 = LED lamp with screw fixing and ON/OFF switch
- 12 = LED lamp with magnetic fixing and motion sensor
- 13 = LED lamp with screw fixing and motion sensor
- 14 = LED lamp with clip fixing and ON/OFF switch
- 15 = LED lamp with clip fixing and motion sensor

Supply version

- 8 = AC (50/60 Hz)
- 9 = DC

Supply voltage

- 024 = (24...48)V DC
- 230 = (100...240)V AC

Rated power of lamp
0005 = 5 W

All types

- 7L.10.9.024.0005
- 7L.10.8.230.0005
- 7L.11.9.024.0005
- 7L.11.8.230.0005
- 7L.12.9.024.0005
- 7L.12.8.230.0005
- 7L.13.9.024.0005
- 7L.13.8.230.0005
- 7L.14.9.024.0005
- 7L.14.8.230.0005
- 7L.15.9.024.0005
- 7L.15.8.230.0005

Note: No cables, plugs or sockets for the electrical connection are included in the delivery. These must always be ordered separately.

Accessories



07L.01



07L.32

Note:

In systems where still standing after turning off the main switch equipment under voltage, this should be specifically identified and consist of a luminous color.



07L.10

0 7 L . 0 1

Type

Connection cable for AC and DC, coded

- 01 = AC connection cable, 2 x 1.5 mm², 2.0 m long with socket: white colour
Cable: white colour for the input side to the AC-lamp
- 02 = DC connection cable, 2 x 1.5 mm², 2.0 m long with socket: blue colour
Cable: white colour for the input side to the DC lamp
- 32 = AC connection cable, 2 x 1.5 mm², 2.0 m long with socket: white colour
Cable: white orange for the input side to the AC-lamp

All connection cables

- 07L.01
- 07L.02
- 07L.32

0 7 L . 1 0

Type

Interconnectors for AC and DC, coded for series connection of 2 lamps (max. 10 lamps)

- 10 = AC Interconnectors, 2 x 1.5 mm², 1.0 m long, plug and socket: white colour
Cable: white colour
- 20 = DC Interconnectors, 2 x 1.5 mm², 1.0 m long, plug and socket: blue colour
Cable: white colour

All connection cables

- 07L.10
- 07L.20

Accessories



07L.11



07L.12



07L.90.xx

0 7 L . 1 0

Type

Sockets and plugs, coded, for AC or DC, for connection to a 2-pole cable (2 x 1.5 mm²), e.g. H05VV-F, 2 x 1.5 mm²

11 = AC socket, loose, colour: white, for input side

12 = AC plug, loose, colour: white, for output side

13 = DC socket, loose, colour: blue, for input side

14 = DC plug, loose, colour: blue, for output side

All sockets

07L.11

07L.13

All plugs

07L.12

07L.14

0 7 L . 9 0 . 0 1

Type

Door contact switch

90 = To be screwed into the cabinet frame, variably adjustable mounting slot, with latching effect

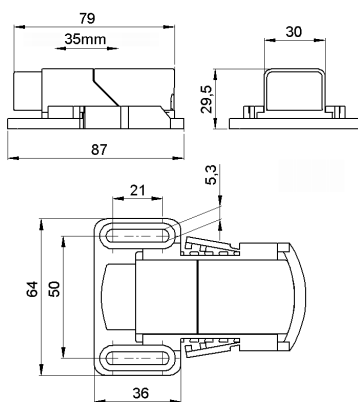
Type of contact


01 = 1 CO, 8 A

02 = 1 NC, 8 A

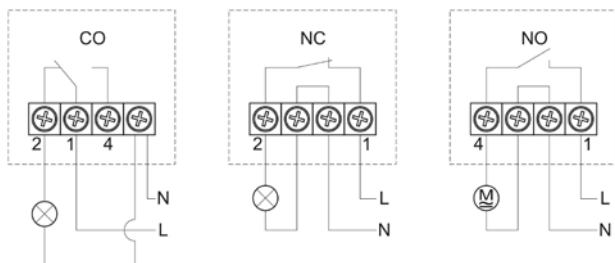
03 = 1 NO, 8 A

Dimensions

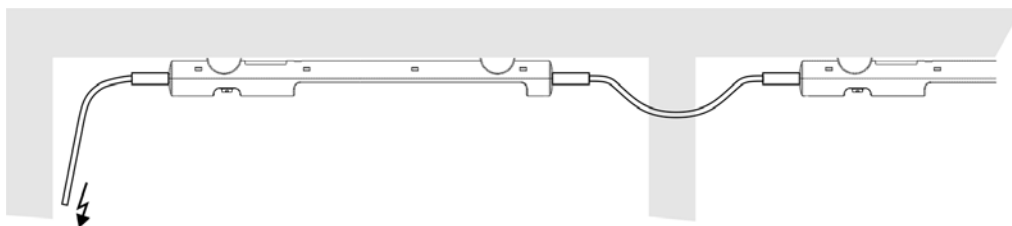


Contact data	07L.90.01	07L.90.02	07L.90.03
Number of contacts	1 CO	1 NC	1 NO
Max. continuous current	A	8	8
Rated voltage	V AC	250	250
Max. switching power AC1	VA	2000	2000
Electrical life	> 10000 cycles		
General data			
Electrical connection	4-pole screw terminals		
Torque of screw connections	Nm	max. 0.5	
Connection cable	Sheathed cable, round, stranded, 2-pole		
Max. size wire	mm ²	0.75...1.5 (with ferrules)	
Type of mounting	Screw (M5)		
Housing	Plastic, grey/black, UL94 V-0		
Position of installation	any		
Ambient temperature	°C	-20...+85	
Protection class	II (Isolation protected)		
Protection category	IP20		
Approvals (details on request)			

Wiring diagrams



Application example



This application example shows an LED lamp with the interconnection to a second LED lamp. The lamps are easily connected together with plug connectors (up to max. 10 lamps). The interlocked plug connections guarantee a secure hold and reliable electrical contact even with strong vibrations.

At cable assemblies which are different from the standard cables length, the plugs and sockets must be ordered separately.

Application instructions

LED lamps

The LED lamp in Series 7L are equipped with an ON/OFF switch or a motion sensor and provide outstanding characteristics for use in cabinets and housings. After opening the door of the cabinet or housing, the electronic or electrical components are very often not immediately recognisable due to the darkness or high packing density in the cabinet and this makes troubleshooting much more difficult.

The light intensity of 5 W LED lamp corresponds to a 95 W incandescent bulb and offers not only high brightness but also a long service life.

Electrical connection of the first lamp

The electrical connection is made with the flexible connection cable, 2 x 1.5 mm², 2.0 m long, with a 2-pole connector.

Electrical connection of additional lamps in series

The connection to the additional lights uses the flexible 2 x 1.5 mm² connection cable, 1.0 m long, with a plug and socket connected.

Connection with custom cable

Plugs and sockets are available for custom line lengths and types. The coding for AC and DC should be noted.

Type of mounting

With magnetic fixing, the lamp can be mounted in any desired location on a steel surface in the cabinet or housing without installation effort. The LED lamp with the screw fixing offers through its permanent attachment a fixed illumination of the cabinet.

By turning the LED lamp in the clip fixing, the LED lamp can be directed exactly to the place that should be lighted. The LED lamp can also be taken out of the clip fixing to get more exact lighting in the cabinet or housing.

To loosen the sockets or the plug to the LED lamp is a screwdriver to use with a blade width of 2 mm.

First commissioning of lights with motion sensors

After electrically connecting the LED lamp, an automatic test program runs to check the motion sensor. The LED lamp flashes briefly twice and goes out again. After the motion sensor is activated again, the LED lamp turns on for 5 seconds and goes out again. The LED lamp is now ready to use. When the motion sensor is activated, the LED lamp will stay on about 5 min. The motion detection range of the motion sensor is 2 m. If the LED lamp is disconnected from the power supply and connected again, the test sequence starts again.

Door contact switch

The door contact switch monitors the position of the cabinet door in three different variants. Depending on the application, the NC switch turns the lighting ON when the cabinet door is opened. In the NO-version, the lighting can be turned ON when the cabinet door is closed. With the CO-version, different applications can be turned ON or OFF.

The door contact is mounted with a 21 mm slot and a wide 35 mm adjustment range for the switch housing, so that the door contact can be variably mounted in many different positions. The two locking levers fasten the door contact switch so that a switching distance of 8 mm remains.

Note:

The lamps must not be used for household lighting.

