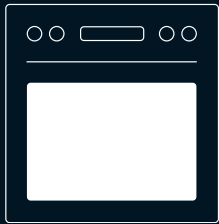


# Light for Appliances



BJB///OEM-Line HOT



LED luminaires for ovens, microwaves  
and steam cookers





# Index

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## LED luminaires for ovens, microwaves and steam cookers

### S. 4 77.112.1001

LED lighting system  
for ovens

- Homogeneous illumination of all levels by means of light guides
- Directional light control focused on the food being cooked
- Brilliant colour rendering realistically displays degree of browning



### S. 6 77.111

LED oven lamp for  
rectangular cut-out

- Light where it is needed: Specific directional light control through reflector/lens technology
- Freedom of design: Flexible positioning in the oven cavity due to small light emitting area
- Energy efficiency: Small installation cut-out minimizes energy losses



### S. 8 77.110

LED oven lamp for  
round cut-out

- Easy upgrade to LED due to standard  $\varnothing = 35.5$  mm cut-out
- In spite of the hot environment: AIRPASS technology ensures low temperatures in the area of the LED



### S. 10 77.109.U101

LED luminaires for microwaves  
and steam cookers

- Homogeneous illumination of the oven cavity
- Simpler design: Depending on installation situation, no further measures required to shield against microwaves
- Costly, time-consuming replacement of light source no longer required







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# LED lighting system 77.112.1001 for ovens

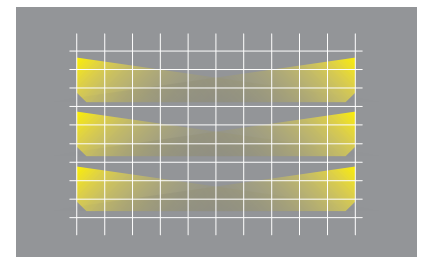
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## HIGH-END SOLUTION WITH LIGHT GUIDES

How much you can see when you look into your oven depends on light distribution and flux levels. Standard lighting solutions do not always provide optimum illumination in the cavity of the oven. Some areas of the oven often remain dark. Our new lighting system changes this situation: Two overlapping light cones illuminate the oven cavity from both sides, guaranteeing a homogeneous illumination at all levels and to the full depth of the oven. The light guides can be arranged either vertically or horizontally. With this technology we achieve a light quality which is ideal for show cooking and food presentation.

## Light emission characteristic



Homogeneous illumination of all levels by means of light guides

## ADDITIONAL FEATURES

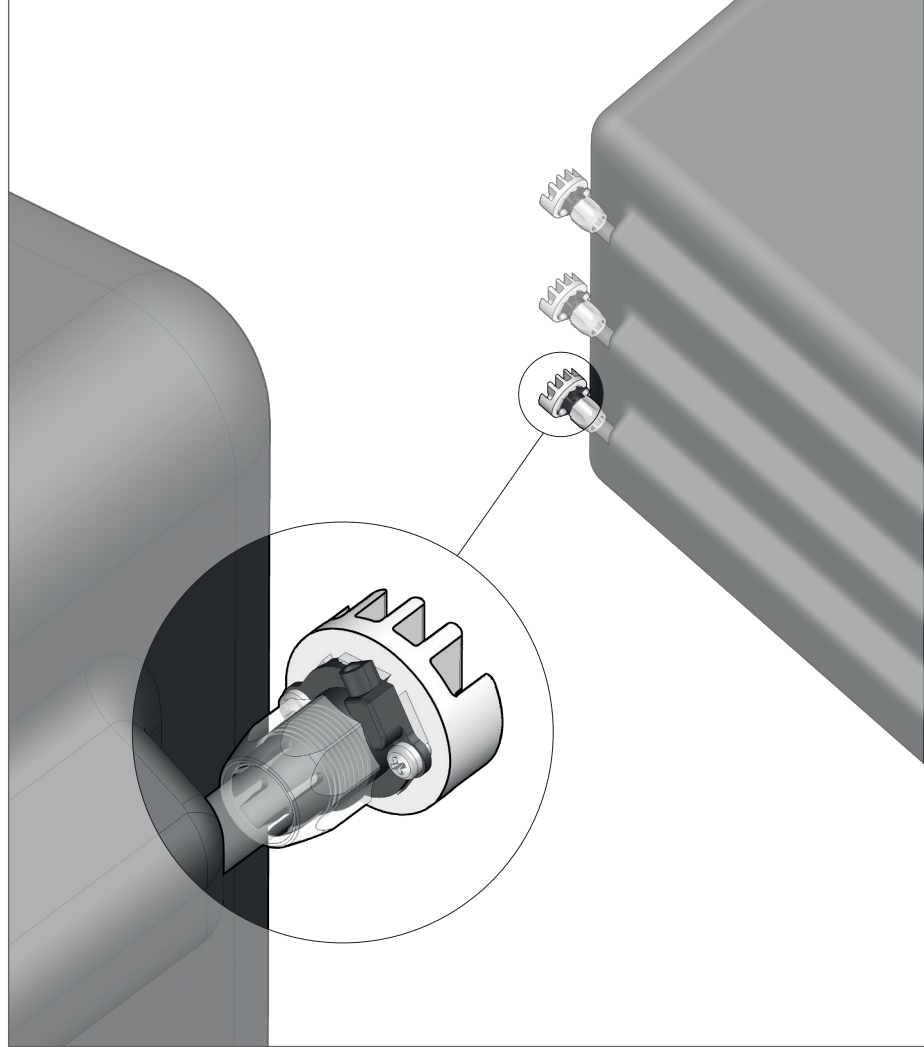
### Fixation method

Due to the individual structures of ovens, we develop the cut-out and method of attachment according to customer-specific requirements.

### LEDs

- Variable LED parameters (colour temperature, CRI, power rating)
- Energy efficiency: Possibility to upgrade to a higher energy efficiency class

Scope of delivery: Including leads



Example of application

## LED

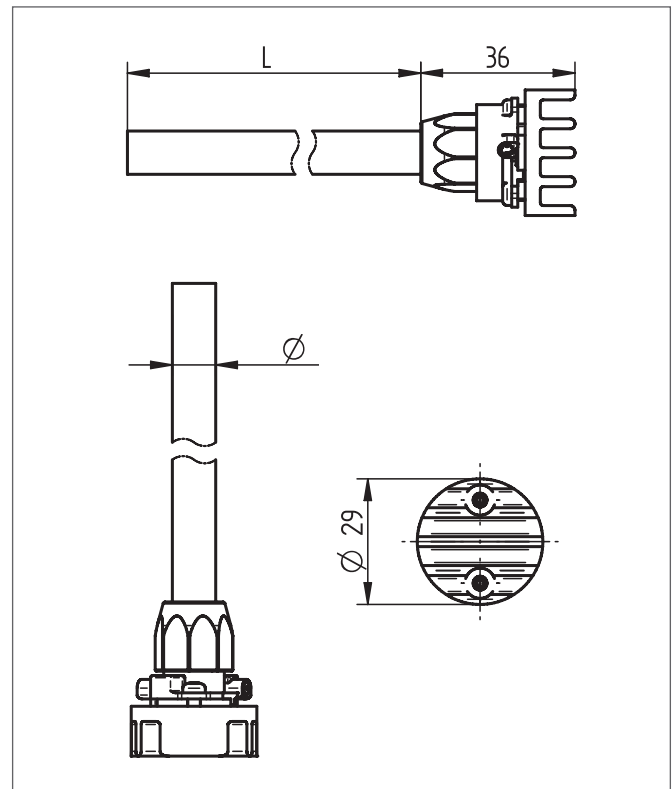
### Technical data

- Beam Angle symmetrical
- Tc max. 130 °C
- Protection class III due to SELV operation



Version	77.112.1001
Forward current IF	1000 mA
Colour rendering CRI	> 90
Colour temperature	3,000 K
Luminous flux	230 lm
Module efficiency	90 lm/W
Forward voltage UF	2.6 V
Power consumption	2.6 W

Tolerances of optical and electrical data: +/- 10%  
The values given represent "typical" data. The minimum and maximum values can be found in the respective data sheets.





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# LED oven lamp 77.111 for rectangular cut-out

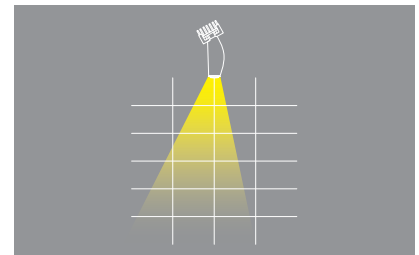
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## TWO SOLUTIONS ARE BETTER THAN ONE: REFLECTOR AND LENS TECHNOLOGY FOR OVEN LIGHTING

Our oven lamps for rectangular cut-outs meet the special lighting requirements set by oven cavities. Their perfectly coordinated reflector and lens technology enables precise, asymmetrical light control. The highly efficient reflector material further improves the homogeneous lighting.

## Light emission characteristic



Light where it is needed: Specific directional light control through reflector/lens technology

## ADDITIONAL FEATURES

### Fixation method

Due to the individual structures of ovens, we develop the cut-out and method of attachment according to customer-specific requirements.

### LEDs

- Variable LED parameters (colour temperature, CRI, power rating)
- The manufacturer can create differentiation within a product group by varying the number of luminaires used
- Energy efficiency: Possibility to upgrade to a higher energy efficiency class

### Light emitting area

- Narrow: 10 x 31 mm

### Small installation opening

- Low heat losses
- No additional embossments and reinforcements required in the oven muffle

### Installation

- Variable positioning, e.g. between the shelves
- Can be used as a ceiling and/or side luminaire



Example of application

**LED**

### Technical data

- Narrow colour tolerance: McAdam 3.0 SDCM
- Beam angle asymmetrical
- Tc max. 135 °C
- Protection class III due to SELV operation

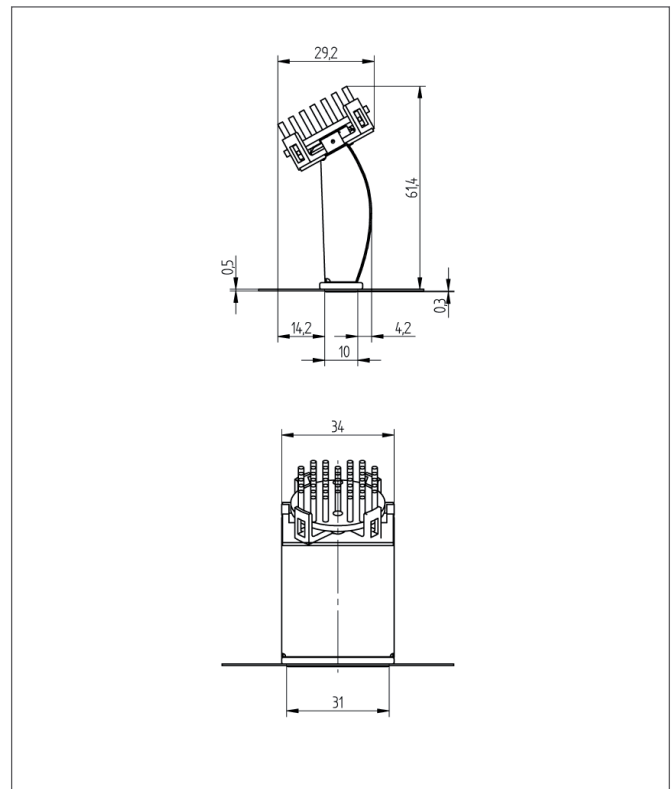


Version	77.111
Forward current IF	1800 mA
Colour rendering CRI	> 90
Colour temperature	3,000 K
Luminous flux	360 lm
Module efficiency *	75 lm/W
Forward voltage UF	2.7 V
Power consumption	4.9 W

Tolerances of optical and electrical data: +/- 10%

The values given represent "typical" data. The minimum and maximum values can be found in the respective data sheets.

\* The luminaire efficiency of 75 lm/W is explained by the specification CRI > 90. The high colour rendering index definitely has a negative effect on efficiency. The two heat-shielding glass covers also reduce efficiency.





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# LED oven lamp 77.110 for round cut-out

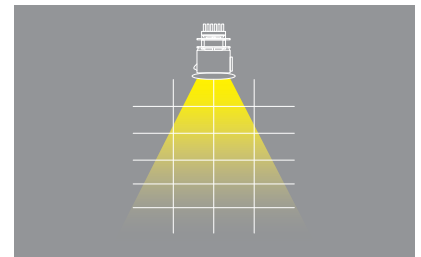
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## INNOVATIVE THERMAL MANAGEMENT FOR THE OVEN LAMP

The AIRPASS technology in our round oven lamps for existing standard cut-outs reduces the effort involved for thermal management within the appliance. For this purpose, AIRPASS discs are located on several levels between the LED light source and the reflector or the glass lens. These enable air to circulate and protect the LEDs from the radiant heat from the oven cavity. An additional cooling airflow in the upper part of the light fixture assists heat dissipation, so that no active cooling is required. As AIRPASS technology makes low-cost installation possible in existing appliance series, these LEDs are suitable as entry-level solutions.

## Light emission characteristic



In spite of the hot environment: AIRPASS technology ensures low temperatures in the area of the LED



## ADDITIONAL FEATURES

Standard  $\varnothing = 35.5$  mm cut-out,  
simple upgrade optional

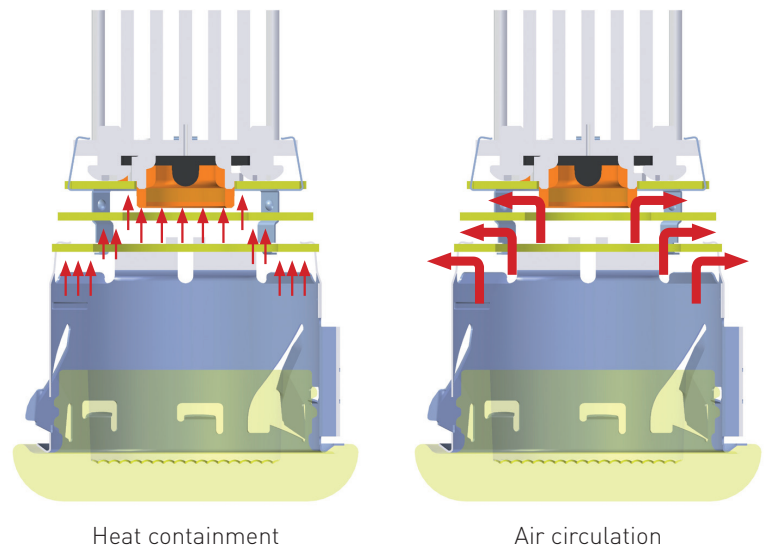
### LEDs

- Variable LED parameters (colour temperature, CRI, power rating)
- Energy efficiency: Possibility to upgrade to a higher energy efficiency class

### Installation

- Easy installation by means of clip-in fixing

Steam-tight version available for multi-function appliances



## LED

### Technical data

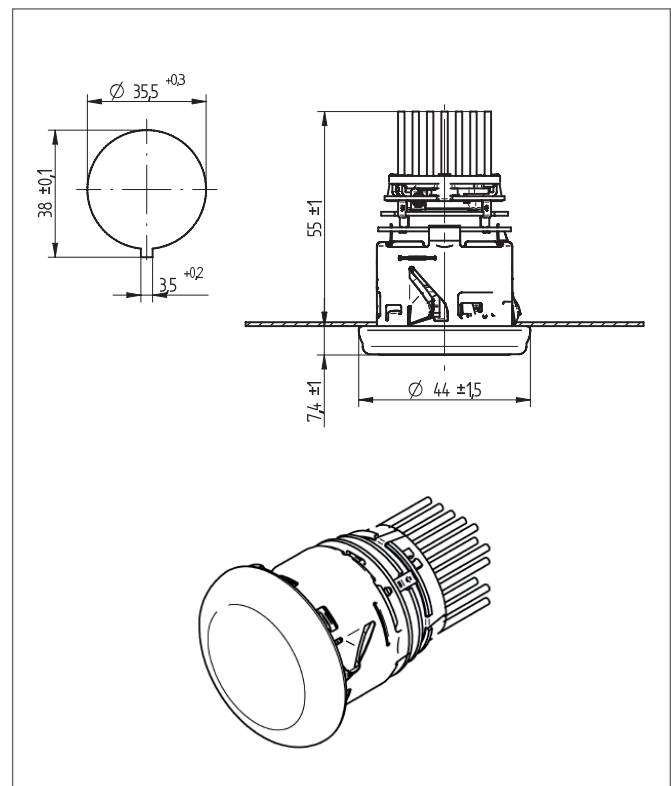
- Colour tolerance: McAdam 3.0 SDCM
- Beam angle symmetrical
- Tc max. 135 °C
- Protection class III due to SELV operation

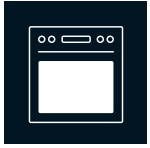


Version	77.110
Forward current IF	1800 mA
Colour rendering CRI	> 90
Colour temperature	3,000 K
Luminous flux	390 lm
Module efficiency *	75 lm/W
Forward voltage UF	3.1 V
Power consumption	5.6 W

Tolerances of optical and electrical data: +/- 10%  
The values given represent "typical" data. The minimum and maximum values can be found in the respective data sheets.

\* The luminaire efficiency of 75 lm/W is explained by the specification CRI > 90. The high colour rendering index definitely has a negative effect on efficiency. The two heat-shielding glass covers also reduce efficiency.

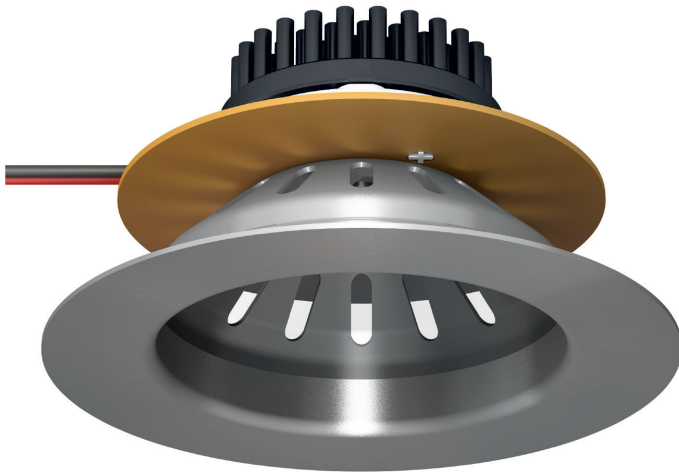




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# LED luminaires 77.109.U101 for microwaves and steam cookers

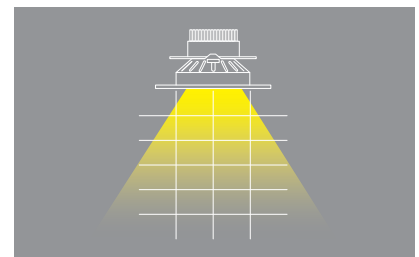
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## SIMPLY BRIGHT

This is what our LED luminaires for microwaves and steam cookers stand for. They guarantee an efficient illumination of the oven cavity. As the lifetime of the LED luminaires exceeds that of the appliances in which they are normally installed, there is no need for time-consuming replacement of light sources in household appliances. Cooking appliances for professional use benefit from a bayonet fixing, which makes the replacement process much easier.

## Light emission characteristic



Optimum illumination of the hob by means of symmetrical lens

## ADDITIONAL FEATURES

### LEDs

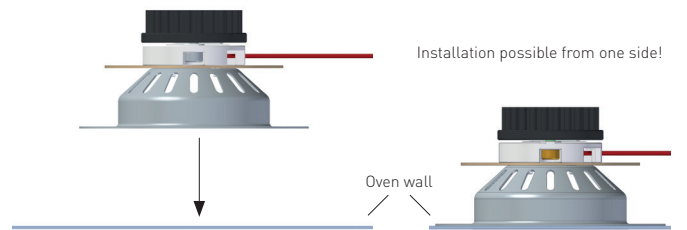
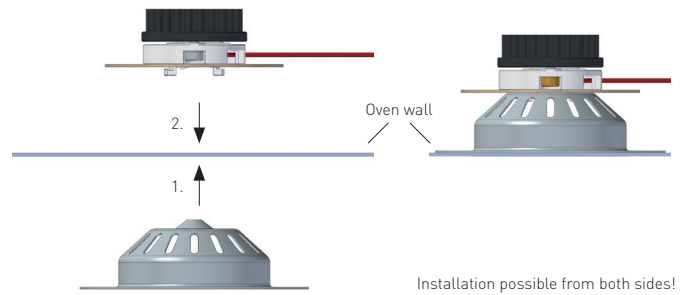
- Use of LEDs with various characteristics possible
- Energy efficiency: Possibility to upgrade to a higher energy efficiency class
- Directional light control possible by means of lens

### Installation

- Does not protrude into the oven cavity
- Method of fixation in the oven cavity: Clinch/Tox connection or screw connection
- Depending on manner of installation, no further measures are required to shield against microwaves

### Further advantages

- Easy to clean
- Easy to replace due to bayonet fixing (important when used in professional appliances)



Example of applications

**LED**

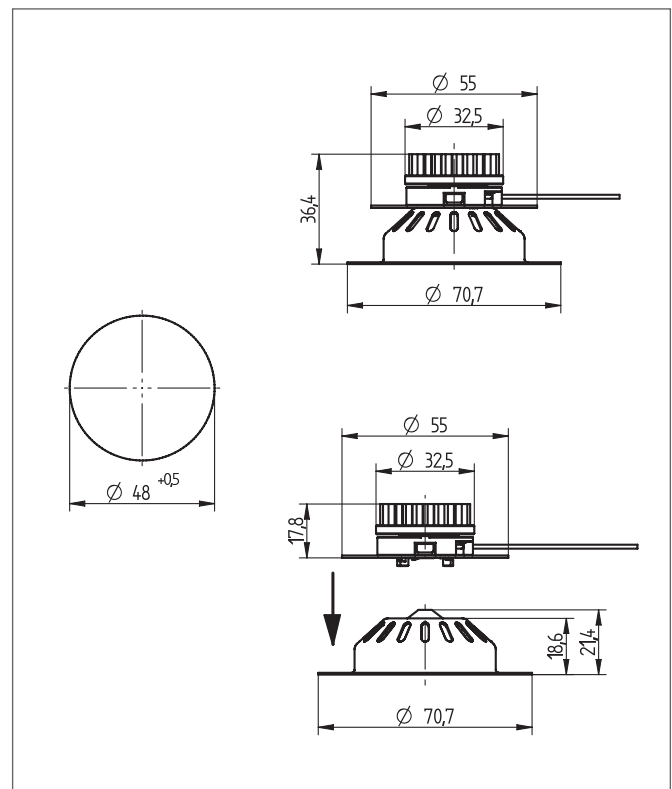
### Technical data

- Narrow colour tolerance: McAdam 3.5 SDCM
- Beam angle symmetrical
- Tc max. 85 °C
- Protection class III due to SELV operation



Version	77.109.U101
Forward current IF	250 mA
Colour rendering CRI	> 80
Colour temperature	3,000 K
Luminous flux	180 lm
Module efficiency	110 lm/W
Forward voltage UF	6.6 V
Power consumption	1.65 W

Tolerances of optical and electrical data: +/- 10%  
The values given represent "typical" data. The minimum and maximum values can be found in the respective data sheets.





Light for Appliances

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