


## Safety instructions



### **DANGER**

#### **Danger caused by wrong mounting or handling!**

Wrong mounting or handling of this unit can result in serious injuries or death.

- First read these instructions and, where appropriate, any other instructions and information attached to the unit! 
- Please observe the warnings and notes included in the instructions and attached to the unit!

### **DANGER**

This symbol identifies items that may directly result in serious injuries or death in case of non-observance or wrong handling.

### **WARNING**

This symbol identifies items that may result in serious injuries or death in case of non-observance or wrong handling.

### **CAUTION**

This symbol identifies items that may result in injuries or material damage in case of non-observance or wrong handling.

### **NOTICE**

This symbol identifies items that may result in material damage in case of non-observance or wrong handling.

## Safety instructions



### **DANGER**

#### **Explosion hazard!**

Operating the light in rooms subject to explosion hazards can trigger an explosion.

- Operate in rooms not subject to explosion hazards only!

### **WARNING**

#### **Danger due to electrical shock in case of contact!**

Maintenance or repair work carried out incorrectly may result in serious injuries or death.

- Disconnect the light from the mains before carrying out any maintenance or repair work!
- Maintenance and repair work must be carried out by a skilled electrician only!
- Disconnect the damaged connecting cable immediately from the power supply and have it replaced by the manufacturer or by a qualified electrician.
- Only parts released by the manufacturer may be used as spare parts!

### **NOTICE**

#### **Damage caused by wrong mains voltage!**

A wrong mains voltage can result in damaging or destroying the lamp.

- Before putting the light into operation, the user has to check whether the mains voltage is identical with the rated voltage specified on the rating plate.

## Safety instructions



### **WARNING**

#### **Risk of blinding!**

Looking directly into the light source may cause temporarily impaired vision and afterimages. This may result in irritations, inconveniences, impairments or even accidents.

- Looking directly into the light source must be avoided.
- Position light in such a way that looking directly into the light source is avoided.

### **NOTICE**

#### **Damage caused by the incident laser beam!**

Direct or indirect incidence of a laser beam may result in the destruction of the LED.

- Use the light only outside the range of action of high-performance lasers (e.g. cutting laser, welding laser).

## Description

# SPOT LED 003

According to standard DIN EN 1837, an illuminance of 500 lx is required in the work area of machines. This is often impossible to achieve using a light that is not in the immediate proximity of the tool. However, only in rare cases is it possible to attach a light directly to the tool slide, since the restricted room available in the interior of the machine room does not allow this.

In the ideal case, a well illuminated machining area is achieved by combining 2 or more lights:

- a) Light for basic illumination of the machining area (using, for example, a Waldmann protective tube light)
- b) Additionally mounted light for the immediate machining area (e.g. Waldmann machine light MCXFL 3, MCTFL 3 or MCBFL 3).

The mounted lights **MCXFL 3**, **MCTFL 3** and **MCBFL 3** meet the requirements of the standard since the joint of the MCXFL 3, the column of the MCBFL3 or the flexible light-supporting hose (swan neck) of the MCTFL 3 allow virtually any positioning of the light. Mounting such a light, in addition to the basic illumination already in place, offers a maximum degree of illumination comfort at the machine.

The use of light emitting diodes (LED) instead of halogen lights allows a significantly higher service life to be achieved. This results in fewer machine downtimes as a result of maintenance work.

A housing made of anodised aluminium and a protective borosilicate glass pane are resistant to hot and sharp-edged chips. The housing is water-proof and resistant to coolants and lubricants.

The selection between various lamp types having different emission characteristics allows a more universal use.

MCXFL 3 = Light without  
column

MCBFL 3 = Light with column

MCTFL 3 = Light with light-  
supporting hose

## Designated use



### Intended purpose:

Mounted light - light for universal use, but in particular as additional lighting of the working area of machines and workstations.

### Place of use:

Only suitable for rooms not subject to explosion hazards.

Not for use in the range of action of high-performance lasers.

### Operating mode:

The light is designed for continuous operation.

## Abbreviations and symbols



Safety or warning instructions!



Important information!



Unit corresponds to international protection class II (protective insulation)



The light is suitable for mounting on normally inflammable surfaces



Observe the disposal instructions!

**LED** Light Emitting Diode



VDE Approval



ENEC Approval



SEV Approval



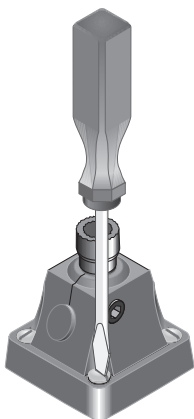
CE Conformity mark



**The manufacturer cannot be held liable for damage caused by using the unit for purposes contrary to the designated use or by ignoring safety instructions and warnings.**

## Mounting

Fig. 11



### General

The light has been designed as stationary light.

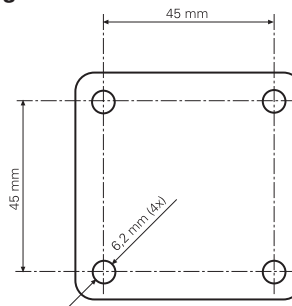
#### NOTICE

#### Damage to the light caused by improper cable layout!

If the cable is laid incorrectly, it may be damaged due to outside influences (e.g. hot chips).

- Make sure that the cable is laid in such a way that it cannot be damaged!
- Position the plug-in connection in such a way that the plug-in power supply unit is not exposed to damaging influences.

Fig. 12



#### CAUTION

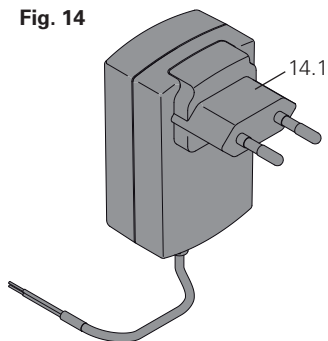
#### Danger due to insufficient fastening!

When mounted incorrectly, the light may tilt.

- The light must be positioned stable by means of screws, desk clamp, magnetic base, wall bracket or other suitable adapter units.
- When using mounting elements which have not been proposed by the manufacturer, the user has to verify their reliability!
- Mounting to a surface suitable for mounting only!
- Mounting by a skilled electrician only!

## Connection

Fig. 14



### NOTICE

#### Damage caused by wrong connection!

An unsuitable operating unit or a wrong connection can result in destroying the light.

- Operate the light with the operating units delivered by the manufacturer only.
- Before putting the light into operation, the user has to check whether the mains voltage is identical with the rated voltage and frequency specified on the rating plate.

### Operating unit

As a standard feature, the luminaire is delivered with a plug-in power supply unit (see Fig. 14).

The plug-in power supply unit can be connected to any earthed or Euro socket.

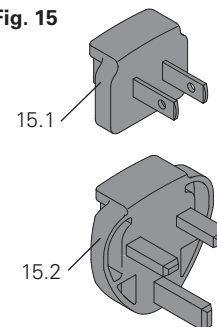
To adapt it to the existing connector system e. g. for use in the US), the plug-in unit [14.1] can be exchanged.



### Note

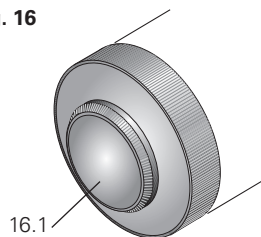
Upon request, additional plug parts (Fig. 15) will be enclosed with the light.

Fig. 15



## Operation

Fig. 16



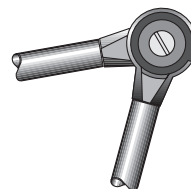
### Switching the light on and off

#### Lights with switch (See Fig. 16)

The light is switched on and off by means of the switch [16.1] located on top of the light head.

#### Lights without switch

The light is switched on/off via external circuit elements or connectors.



### Adjusting the articulation joints

The joints are adjustable.

Each joint must be adjusted such that the light is - on the one hand - easily movable and - on the other hand - remains in the position desired by the user.

### CAUTION

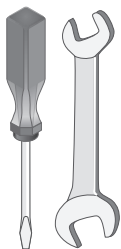
#### Hazard to man and material caused when light tilts!

Articulation joints adjusted wrongly may cause the light to tilt!

- Adjust each articulation joint such that the adjustment cannot change by itself.



## Maintenance and repairs



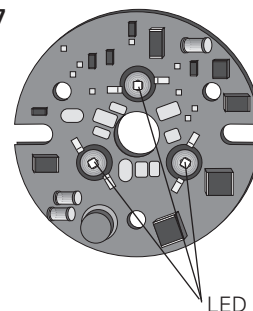
### **WARNING**

#### **Danger due to electrical shock in case of contact!**


Maintenance or repair work carried out incorrectly may result in serious injuries or death.

- Disconnect the light from the mains before carrying out any maintenance or repair work!
- Maintenance and repair work must be carried out by a skilled electrician only!
- Disconnect the damaged connecting cable immediately from the power supply and have it replaced by the manufacturer or by a qualified electrician.
- Only parts released by the manufacturer may be used as spare parts!

Fig. 17



### **Defective light source**

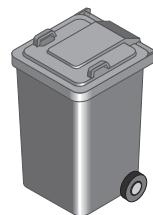
 The light works with light emitting diodes (LED). The useful life of LEDs exceeds by far that of conventional lamps (e.g. light bulbs). Therefore, a light source replacement is rarely necessary.

If nevertheless one of the three LEDs should break down, the entire LED module [Fig. 17] must be replaced.


**Care****NOTICE****Risk of damage through wrong care!**

Wrong care may destroy the unit.

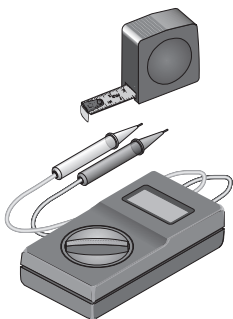
- Clean the transparent cover at regular intervals!
- Clean the light parts only with a cloth impregnated with a suitable household cleaning agent!
- Make sure the agents used are compatible with paints and plastics!

**Disposal****NOTICE****Environmental hazard!**

Wrong disposal endangers our environment.

- Return the unit at the end of its useful life to the available recycling systems! 

## Technical data



### General data

Classification:

- Protection class

Plug-in power supply unit II

Light III

For the type of protection,  
see rating plate\*

Operating mode:

Continuous operation

Technical safety check:

according to EN 60598-1

### Electrical values

Nominal voltage

Plug-in power supply unit

100-240 V AC

Light 24 V DC (SELV)

Frequency range 50/60 Hz

Power consumption approx. 10 W

\* Mixed type of protection:

**IP40** [IP67] means

Light IP40

Light body IP67

### Dimensions

#### MCXFL 3 N

Light module without base

approx. Ø 65 x 104 mm

Connecting cable plus plug-in

power supply approx. 3000 mm

#### MCTFL 3 N

Light body ca. Ø 65 x 104 mm

Light-supporting hose

approx. 600 mm

Connecting cable plus plug-in

power supply approx. 3000 mm

#### MCBFL 3 N

Light body ca. Ø 65 x 104 mm

Column

approx. 422 + 280 + 82 mm

Connecting cable plus plug-in

power supply approx. 3000 mm

### NOTICE

#### Risk of damage due to differences from the standard design.

If required, this series of units will be supplemented by further variants. The technical data may therefore be subject to modifications.

➤ Always observe the data and symbols given on the rating plate!