**Plug + Light**

The new Waldmann SPOT LED 003

Innovative LED lighting technology for the most demanding environments

"Plug + Light" - Waldmann Lighting’s SPOT LED 003 is a technologically advanced, waterproof LED luminaire designed for the most demanding production and machining environments. With innovative LED technology, proven product quality and an industrial grade design, the SPOT LED 003 provides years of bright, maintenance-free illumination precisely where you need it.

What makes the new SPOT LED 003 so exceptional? The intelligent circuit board technology, specifically developed and manufactured by Waldmann, incorporates all functions into one complete lighting package. The SPOT LED 003 is the most durable and convenient lighting solution in the marketplace. Simply connect to any AC or DC 24V power supply, regardless of polarity, and the SPOT LED 003 technology does all the work. The ingenious electronic engineering allows voltage fluctuations of 16-40 Volts DC or 14-30 Volts AC while guaranteeing a uniform light output of up to 300 lumens.

The SPOT LED 003 also assures reliable waterproof performance in any environment. High luminous power with low power consumption and an extremely long service life, all in a very compact package - LED technology is without question the lighting technology of the future.

Using the latest LUXEON® K2 LED lamps, the SPOT LED 003 is generating a consistently high quality of illumination with a service life of 50,000 hours (that’s approx. 6 years of continuous operation) - this light source is maintenance-free. Also, since LED illumination is generated in the high frequency range of 300kHz, any difficult stroboscopic effect is eliminated allowing the SPOT LED 003 to be used in any modern industrial application or where safety is a concern.

Another advantage of the SPOT LED 003, critical in any work area, is its low heat output. The intelligent circuit board directs the heat onto the hardened aluminum housing, allowing only a cool beam of light to be generated outward and extending the life of the LUXEON® K2 LED lamp.

All LUXEON® SPOT LED 003 components are manufactured to the highest standards consistent with all Waldmann products, using only the strongest quality materials.

The SPOT LED 003 is available in a number of popular styles, including an ARTICULATING ARM, GOOSE-NECK and PIVOTING HEAD, as well as SURFACE and FLUSH MOUNTED versions. For optimal lighting conditions, high reliability and a high level of energy efficiency, the SPOT LED 003 is the ideal task light for all industrial workplace environments.
SPOT LED 003 - FEATURES AND BENEFITS

INTELLIGENT DESIGN FOR DIRECT CONNECTION TO
24-VOLT POWER SUPPLY (AC OR DC CURRENT)
• Integrated operating device
• Automatic adjustment of polarity
• Quick and error-free installation

NO STROBOSCOPIC EFFECT
• Light generated at high frequency (300 kHz)
• Improved safety for operator
• Even, flicker-free illumination

NEGLIGIBLE HEAT GENERATED IN THE DIRECTION OF THE LIGHT BEAM
• No adhesion of coolants or lubricants on the luminaire
• Consistently high level of illuminance
• Minimal thermal impact on components

LED - THE LIGHTING ELEMENT OF THE FUTURE

With high luminous power, an extremely long service life, low power consumption and very compact dimensions, LED technology is the lighting technology of the future. With the tremendous growth of the LED as a light source used in signalling, automotive and decorative applications, the first family of functional LED lighting solutions for the workplace is now available from Waldmann.

As one of the leading innovators of functional LED lighting, Waldmann now offers a complete range of high-quality luminaires based on LED technology. At the heart of the new Waldmann SPOT LED 003 luminaire is a newly developed circuit board that intelligently compensates for voltage fluctuations and an integral thermal management system for optimal LED performance. Installation is easy with a variety of mounting options and accessories.

The Waldmann SPOT LED 003 is the most technologically advanced, highest quality LED industrial tool and machine luminaire available today.

These new LUXEON® K2 LEDs generate minimal heat in the direction of the light beam and are not affected by vibrations or movement, so they are well suited for the precise illumination required in industrial workplaces. An important advantage for the industrial work environment is the high color temperature of the LED source, which promotes concentration and precision. This results in improved safety and better productivity for machine operators.
The SPOT LED 003 ARTICULATING ARM has a maximum working radius of 32” and is designed for larger work areas and machines where precise, flexible luminaire positioning is essential. It easily covers larger distances, ensuring ideal lighting conditions and flexibility in the work area. A smooth motion intermediate joint with disc springs allows quick and precise positioning. The additional joint on the base of the luminaire provides even more flexibility.

With Waldmann’s world-class LED technology, arm design, mounting options, and accessories, positioning the SPOT LED 003 to the work surface is precise and effortless. The SPOT LED 003 ARTICULATING ARM provides maximum adjustability and function for years of precise lighting on the work surface or machine.

### TECHNICAL DATA

**Articulating Arm**

For common technical data see the foldout page at the back of the brochure.

**Fitted with**
3 x 3 watts

**Operational**
with switch (versions without switch available upon request)

<table>
<thead>
<tr>
<th>Loaded</th>
<th>Beam Angle</th>
<th>Technology</th>
<th>System of Protection*</th>
<th>Model</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-240 V, 50/60 Hz</td>
<td>10°</td>
<td>plug-in transformer</td>
<td>IP40 (IP65)</td>
<td>MCBL 3 N</td>
<td>112 453 007</td>
</tr>
<tr>
<td>100-240 V, 50/60 Hz</td>
<td>40°</td>
<td>plug-in transformer</td>
<td>IP40 (IP65)</td>
<td>MCBL 3 N</td>
<td>112 453 009</td>
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<td>24 V, AC/DC</td>
<td>10°</td>
<td>without transformer</td>
<td>IP55</td>
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<td>24 V, AC/DC</td>
<td>40°</td>
<td>without transformer</td>
<td>IP55</td>
<td>MCBL 3 S</td>
<td>112 453 003</td>
</tr>
</tbody>
</table>

* Luminaire system of protection (Luminaire body)

**Special Features**
- Maximum working radius of 32”
- Fully adjustable arm
- 5-axis arm movement

Note: Detailed datasheets are available at www.waldmann.com or by calling (800) 634-0007.
SPOT LED 003 – GOOSE-NECK ARM

The SPOT LED 003 GOOSE-NECK ARM is often used where work space is limited. This high-quality arm, with a working radius of 24”, allows quick, easy and precise positioning without the luminaire springing back or moving unexpectedly. An additional pivoting joint on the luminaire head allows fine adjustment of the LED light source in any direction.

Like all Waldmann components, this arm is designed for the toughest long-term use and shows no signs of fatigue even after 20,000 movements and everyday adjustments. With a variety of Waldmann mounting options and accessories, the SPOT LED 003 GOOSE-NECK ARM is easy to install and provides maximum flexibility and adjustability in smaller work areas and machines.

TECHNICAL DATA

FOR COMMON TECHNICAL DATA SEE THE FOLDOUT PAGE AT THE BACK OF THE BROCHURE.

<table>
<thead>
<tr>
<th>FITTED WITH</th>
<th>3 x 3 watts</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERATION</td>
<td>(with switch functions without switch available upon request)</td>
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</table>

<table>
<thead>
<tr>
<th>CONNECTED LOAD</th>
<th>BEAM ANGLE</th>
<th>TECHNOLOGY</th>
<th>SYSTEM OF PROTECTION</th>
<th>MODEL</th>
<th>ORDER NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-240 V, 50/60 Hz</td>
<td>10°</td>
<td>plug-in transformer</td>
<td>IP40 (IPSS)</td>
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<tr>
<td>100-240 V, 50/60 Hz</td>
<td>40°</td>
<td>plug-in transformer</td>
<td>IP40 (IPSS)</td>
<td>MCTFL 3 N</td>
<td>112 462 009</td>
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<tr>
<td>24 V, AC/DC</td>
<td>10°</td>
<td>without transformer</td>
<td>IP65</td>
<td>MCTFL 3 S</td>
<td>112 462 001</td>
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<tr>
<td>24 V, AC/DC</td>
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<td>without transformer</td>
<td>IP65</td>
<td>MCTFL 3 S</td>
<td>112 462 003</td>
</tr>
</tbody>
</table>

*Luminaire system of protection (luminaire body)

SPECIAL FEATURES

- Working radius of 24”
- Quick, precise positioning
- Strong and durable arm

Note: Detailed datasheets are available at www.waldmann.com or by calling (800) 634-0007.
The SPOT LED 003 PIVOTING HEAD has been designed for permanent integration in smaller machines. Its sturdy construction with an enclosed luminaire head offers effective protection from sources of mechanical stress such as flying chips when grinding, engraving or sawing. The magnetic base, available as an accessory, offers a simple means of fastening the luminaire to the machine.

With IP67 rated dust and fluid protection, the SPOT LED 003 PIVOTING HEAD can withstand even the most demanding work environments, subjected to oil, fluids, chemical coolants and debris.

With precise positioning and maintenance-free LED lamp technology, the SPOT LED 003 PIVOTING HEAD provides a premium light source for the work or machining area.

**TECHNICAL DATA**

- **SPOT LED 003 – PIVOTING HEAD**
- **CONNECTION**
  - 3 x 3 watts
  - with or without switch

**OPERATION**
- with or without switch

**SYSTEM OF PROTECTION**
- IP65
- IP66
- IP67
- N

**MODEL**
- MCXFL 3 S

**ORDER NO.**
- 112 493 001
- 112 493 003
- 112 493 006
- 112 493 007
- 112 493 009

**DIMENSIONAL DATA (mm)**

<table>
<thead>
<tr>
<th>CONNECTED LOAD</th>
<th>BEAM ANGLE</th>
<th>TECHNOLOGY</th>
<th>SYSTEM OF PROTECTION</th>
<th>MODEL</th>
<th>ORDER NO.</th>
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</thead>
<tbody>
<tr>
<td>24 V, AC/DC with switch</td>
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<td>without transformer</td>
<td>IP65</td>
<td>MCXFL 3 S</td>
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<tr>
<td>24 V, AC/DC with switch</td>
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<td>without transformer</td>
<td>IP66</td>
<td>MCXFL 3 S</td>
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<tr>
<td>24 V, AC/DC without switch</td>
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<td>without transformer</td>
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<tr>
<td>1000-240 V, 50/60Hz</td>
<td>40°</td>
<td>plug-in transformer</td>
<td>IP68</td>
<td>MCXFL 3 N</td>
<td>112 493 009</td>
</tr>
</tbody>
</table>

* Luminaire system of protection (Luminaire body)

**SPECIAL FEATURES**
- Ideal for permanent integration in machines
- Maximum versatility through pivoting head joint
- Adjustable, space-saving design

Note: Detailed datasheets are available at [www.waldmann.com](http://www.waldmann.com) or by calling (800) 634-0007.
The SPOT LED 003 SURFACE MOUNT and FLUSH MOUNT versions are designed for easy integration in small machines or work areas in which the light direction is fixed. While the SURFACE MOUNT is noted for its quick integration and low installation costs, the FLUSH MOUNT model provides minimal intrusion into the work area due to its integration into the machine wall, utilizing even less space while minimizing the accumulation of chips and debris.

Note: Due to their compact size, these luminaires must be connected to a metal surface with a minimum area of 1 sq. ft. (12”x12”) to ensure heat dissipation.

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>SURFACE MOUNT LOAD</th>
<th>BEAM ANGLE</th>
<th>TECHNOLOGY</th>
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<tbody>
<tr>
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<table>
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<tr>
<th>FLUSH MOUNT LOAD</th>
<th>BEAM ANGLE</th>
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<tr>
<td>24 V. AC/DC</td>
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<td>without transformer</td>
<td>IP67</td>
<td>MCEVL 3.5</td>
<td>112 480 001</td>
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<tr>
<td>24 V. AC/DC</td>
<td>40°</td>
<td>without transformer</td>
<td>IP67</td>
<td>MCEVL 3.5</td>
<td>112 480 003</td>
</tr>
</tbody>
</table>

* Luminaire system of protection (Luminaire body)

### SPECIAL FEATURES

- Ideal for permanent integration in machines
- Easy integration and low installation costs
- Low profile, space-saving design

Note: Minimum requirements for the cooling surface: 1 sq. ft. (12” x 12”)

Detailed datasheets are available at www.waldmann.com
### ACCESSORIES

**TABLE CLAMP**

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<tr>
<th>TYPE/MODEL</th>
<th>COLOR</th>
<th>SPAN</th>
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<tbody>
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<td>Table Clamp</td>
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**TABLE BASE**

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**MAGNETIC BASE**

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**WALL BRACKET**

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<tbody>
<tr>
<td>Wall Bracket</td>
<td>black</td>
<td>300 212 018</td>
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</tbody>
</table>

### OTHER LUMINAIRES FROM WALDMANN

#### HALOGEN
- Precise aiming of halogen light source
- Flexible mounting and positioning
- Proven arm design for industrial applications
- Waterproof models available

#### FLUORESCENT
- Designed for wide area flood illumination
- Available in a variety of sizes and lamping configurations
- Waterproof IP67 rated tube luminaire
- A wide range of mounting options and accessories

#### WORKSTATION
- Wide area illumination at the work area
- Adjustable spring balanced arm
- Flexible mounting and precise positioning
- Excellent light distribution and glare control

#### MAGNIFICATION AND INSPECTION
- Uncompromising design, quality and functionality
- Arms designed for professional use
- Distortion free glass optics for precise viewing
- General illumination and magnification for the work area
## TECHNICAL DATA AND LIGHT DISTRIBUTION

DETAILED DATASHEETS AVAILABLE @ WWW.WALDMANN.COM OR BY CALLING (800) 634-0007

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>HOUSING</th>
<th>Aluminium, hard-anodized (hard coating)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAMP COVER</td>
<td>Borosilicate glass lens</td>
</tr>
<tr>
<td>POWER CABLE</td>
<td>Approx. 10 ft</td>
</tr>
</tbody>
</table>

### LIGHT DISTRIBUTION IN FOOTCANDLES (MEASURED AT 20 INCHES)

#### BEAM ANGLE OF 10°

#### BEAM ANGLE OF 40°