Sealed LED Strip Lights

- Rugged, IP66, IP67 and IP69K design for harsh indoor and outdoor applications
- Single-, dual-, or multicolored models for custom illumination, indication and more
- EZ-STATUS® models combine illumination and indication
- Hazardous location models for gas and dust environments
Advanced Solutions
- Eight lengths available from 145 to 1130 mm
- Hi/Lo/Off settings are controlled by the wiring
- Available in 6 colors to meet your application needs
- Dual-color and multicolor models controlled by two or three wires

Challenge
- Enclosed area is dark, making it hard for operators to see potential problems
- Machines are exposed to washdown procedures
- Light must not break during operation and cleaning

Solution
- Bright LED illumination is rated for 50,000 hours
- Hygienic, IP69K certified housing for food processing and washdown environments
- Rugged design with shatterproof copolyester shell can be installed directly inside of the machine without worry

Single-Color

<table>
<thead>
<tr>
<th>Family</th>
<th>Cascadable</th>
<th>Color</th>
<th>Lighted Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLS27</td>
<td>X</td>
<td>W</td>
<td>145 285 570 990</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>285 710 1130</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>430 850</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Window</th>
<th>Construction</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>S</td>
<td>Q</td>
</tr>
<tr>
<td>D = Diffused Plastic</td>
<td>S = Sealed</td>
<td>Q = Integral Euro QD (dc)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>Cool White</th>
<th>Warm White</th>
<th>Red</th>
<th>Green</th>
<th>Blue</th>
<th>Yellow</th>
<th>Typical Wattage* (Watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>145</td>
<td>325</td>
<td>325</td>
<td>55</td>
<td>180</td>
<td>40</td>
<td>50</td>
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<tr>
<td>285</td>
<td>650</td>
<td>650</td>
<td>110</td>
<td>360</td>
<td>80</td>
<td>100</td>
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<tr>
<td>430</td>
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<td>975</td>
<td>165</td>
<td>540</td>
<td>120</td>
<td>150</td>
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<td>570</td>
<td>1300</td>
<td>1300</td>
<td>220</td>
<td>720</td>
<td>160</td>
<td>200</td>
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<td>710</td>
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<td>1625</td>
<td>275</td>
<td>900</td>
<td>200</td>
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<td>1950</td>
<td>1950</td>
<td>330</td>
<td>1080</td>
<td>240</td>
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<tr>
<td>990</td>
<td>2275</td>
<td>2275</td>
<td>385</td>
<td>1260</td>
<td>280</td>
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<td>2600</td>
<td>440</td>
<td>1440</td>
<td>320</td>
<td>400</td>
<td>30</td>
</tr>
</tbody>
</table>

*Typical operating wattage is measured at 24 V dc
**Dual-Color**

**Challenge**
- On large machines, it can take time to determine the source of a problem
- Once a problem is identified, high quality task lighting is required for troubleshooting

**Solution**
- Dual color lights alert operators to the machine condition and direct them to the location of the problem
- Allows operators to respond more quickly to status changes
- When the guard door opens, the light returns to white task lighting, providing clear visibility for troubleshooting

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**Colors (C) / Density (D)**

- **W =** Daylight White
- **WW =** Warm White
- **B =** Blue
- **Y =** Yellow
- **D =** Diffused Plastic
- **H =** Heavy Diffuse

**Lighted Length (mm)**

- 145 710
- 285 850
- 430 990
- 570 1130

**Window**

- **D =** Sealed

**Construction**

- **S =** Integral Euro QD

**Connector**

- **Q =** Integral Euro QD

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**Lighting Specifications**

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>White</th>
<th>Red</th>
<th>Yellow</th>
<th>Green</th>
<th>Blue</th>
<th>Typical Wattage* (Watts)</th>
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<td>700</td>
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<td>1900</td>
<td>800</td>
<td>600</td>
<td>1200</td>
<td>440</td>
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</tbody>
</table>

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**Illumination**

Light up a space to increase productivity and improve worker ergonomics and safety.
- Low bay task lights bring extra light where needed when high bay or ceiling lights are insufficient or are blocked by structures
- Task lights provide bright, focused light for finer tasks at workstations
- Heavy-duty machine lights allow operators to see into machine enclosures to visually monitor machine processes

**Indication**

Use colored light to provide visual status updates.
- Tower lights and other indicators can change colors and/or flash when a change in status has occurred
- Let a manager know he or she is needed at a station
- Alert an operator that a machine has jammed or material needs to be refilled

**Illumination + Indication**

EZ-STATUS® models combine illumination and multiple indication capabilities in a single device.
- Promotes faster responses to status changes
- Improves ergonomics and limits wasted movement
- Reduces the risk of costly mistakes and accidents
**Multicolor with EZ-STATUS®**

**Challenge**
- At workstations, operators may not see tower lights unless they are looking up and in the general direction of the indicator.
- Operators may tune out audible alarm cues.
- Not seeing or hearing an alert right away slows response time.

**Solution**
- Multicolor task lights provide illumination during normal operation and offer a large variety of color options for status indication.
- When an alert occurs, the task light turns a designated color, flooding the whole work space with that color.

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<table>
<thead>
<tr>
<th>Family</th>
<th>Cascadable</th>
<th>Color 1-5 and Control</th>
<th>Lighted Length (mm)</th>
<th>Window</th>
<th>Construction</th>
<th>Voltage</th>
<th>Connector</th>
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<tbody>
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<td>X</td>
<td>WGRXX3</td>
<td>0285</td>
<td>D</td>
<td>S</td>
<td>24</td>
<td>Q</td>
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<td></td>
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<td>S</td>
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<td>Q</td>
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<tr>
<td>WGRXX3</td>
<td>C = Cascadable</td>
<td>X = Non Cascadable</td>
<td>0285</td>
<td>D = Diffused Plastic</td>
<td>H = Heavy Diffuse</td>
<td>24 = 24 V</td>
<td>Q = Integral Euro QD</td>
</tr>
</tbody>
</table>

WGRXX3 = White, Green, and Red with override control
WYRX3 = White, Yellow, and Red with override control
GYRX3 = Green, Yellow, and Red with override control
WGRY5 = White, Green, Red, Yellow, and Blue with binary control
WGRX6 = White, Green, and Red with I/O Block control
WYRX6 = White, Yellow, and Red with I/O Block control
GYRX6 = Green, Yellow, and Red with I/O Block control

**Lumens (Typical @ 25 °C)**

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>Daylight White</th>
<th>Red</th>
<th>Green</th>
<th>Blue</th>
<th>Yellow</th>
<th>Typical Wattage* (Watts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0285</td>
<td>650</td>
<td>185</td>
<td>400</td>
<td>125</td>
<td>570</td>
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<td>740</td>
<td>1600</td>
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<td>2280</td>
<td>30</td>
</tr>
</tbody>
</table>

*Typical operating wattage is measured at 24 V dc.*
HLS27 Hazardous Location

- Certified for use in Class I Division 2, Class II Division 2, Class III Division 1 & 2, and Zone 2 & 22 locations
- Slim, space-saving design opens mounting possibilities and limits obstruction
- IP66, IP67 construction for installation in indoor, outdoor and washdown environments
- Single- and dual-color models for advanced signaling, inspection and other applications
- Custom brackets make mounting easy and protect against impact
- Intensity control via Hi/Lo/Off wiring or PWM dimming

### Single-Color

<table>
<thead>
<tr>
<th>Family</th>
<th>Type</th>
<th>Color</th>
<th>Lighted Length (mm)</th>
<th>Window</th>
<th>Control</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLS27</td>
<td>D</td>
<td>W</td>
<td>0145</td>
<td>C</td>
<td>Blank</td>
<td>C = Clear</td>
</tr>
</tbody>
</table>

- D = Enhanced Protection (Zone 2)
- W = Cool White
- WW = Warm White
- G = Green
- B = Blue
- R = Red
- Y = Yellow

*Typical operating wattage is measured at 24 V dc*
Challenge
- Visibility is critical for visual inspection of product and machine performance in flexographic printing
- The presence of inks and solvents qualifies the machine area as Class I Division 2

Solution
- HLS27 provides bright light so operators can verify print quality
- The slim design easily fits in the machine without obstructing the equipment or view
- Eight length options allow the HLS27 to fit across different material sizes
- Dimming options give the operator control of intensity and provide additional energy savings

Dual-Color

<table>
<thead>
<tr>
<th>Family</th>
<th>Type</th>
<th>LED Color</th>
<th>Lighted Length (mm)</th>
<th>Window</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLS27</td>
<td>D</td>
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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Daylight White</td>
<td>Red</td>
</tr>
<tr>
<td>145</td>
<td>275</td>
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<tr>
<td>285</td>
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<td>230</td>
</tr>
<tr>
<td>430</td>
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<td>345</td>
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<tr>
<td>570</td>
<td>1100</td>
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<td>710</td>
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<td>850</td>
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<td>990</td>
<td>1925</td>
<td>805</td>
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<tr>
<td>1130</td>
<td>2200</td>
<td>920</td>
</tr>
</tbody>
</table>

*Typical operating wattage is measured at 24 V dc
WLS27

- ø 27 mm
- First or Middle of Cascade
- Stand-Alone or Cascade End Light

HLS27

- ø 38 mm
- Hazardous Location Models

**Accessories**

- **LMBWLS27EC** Stainless steel
- **LMBWLS27H** Stainless steel
- **LMBWLS27U** Stainless steel
- **LMBWLS27SP** Stainless steel

**IP69K Washdown Cables**

- **WLS28-2MQ** In-Line Motion Detection Switch with M12 Connectors (not sealed—IP50)

**Standard Cables**

- **M12 Euro-Style Cordsets** Splitter
- **MQDC-WDSS-0406** 2 m (6.5')
- **MQDC-WDSS-0415** 5 m (15')
- **MQDC-WDSS-0430** 9 m (30')
- **MQDEC-WDSS401SS** 0.3 m (1')
- **MQDEC-WDSS403SS** 1 m (3')
- **MQDEC-WDSS406SS** 2 m (6.5')

**Supply Voltage**

- Single-, Dual-color, HLS27 models: 12 to 30 V dc
- Multicolor models: 24 V dc

**Construction**

- Clear anodized aluminum inner housing
- All HLS27 models: FDA-grade copolyester outer housing
- HLS27 models: UV stabilized polycarbonate outer housing

**Operating/Storage Temperature**

- Single-, Dual-color, HLS27 models: -40 to +70 °C (~-40 to +158 °F)
- Multicolor models: -40 to +50 °C (~-40 to +122 °F)

**Connections**

- All HLS27 models: Integral 4-pin M12 quick disconnect fitting (for right-angle, add RA to the end of the model number)
- HLS27 models: 2.0 m (6.3 ft) ITC-ER cable with unterminated tinned leads

**Environmental Rating**

- All HLS27 models: IP67, IEC 60068-2-6
- HLS27 models: IEC IP66, IEC IP67

**Vibration and Mechanical Shock**

- Vibration: 10-55 Hz, 1.0 mm p-p amplitude per IEC 60068-2-6
- Shock: 15G, 11 ms duration, half sine wave per IEC 60068-2-27

**Certifications**

- WLS27 models:
  - CE Marking
  - UL
  - Hazardous Location Models
- HLS27 models:
  - CE Marking
  - D Marking
  - Hazardous Location Models

**Lighted Length**

- **WLS27**
  - 145 mm: 710 mm
  - 285 mm: 850 mm
  - 430 mm: 990 mm
  - 570 mm: 1130 mm

- **HLS27**
  - Single-, Dual-color, HLS27 models: 12 to 30 V dc
  - Multicolor models: 24 V dc

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**Environmental Rating**

- All HLS27 models: IEC IP66, IP67, IP69K per DIN 40050
- HLS27 models: IEC IP66, IEC IP67

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- Vibration: 10-55 Hz, 1.0 mm p-p amplitude per IEC 60068-2-6
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  - Hazardous Location Models
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- **HLS27**
  - ø 38 mm
  - Hazardous Location Models