



# EUROASFALT

**Product data sheet**  
Active Plough-resistant Reflecting Road Stud

**ŚNIEŻKA-3 LED (S-3LED)**



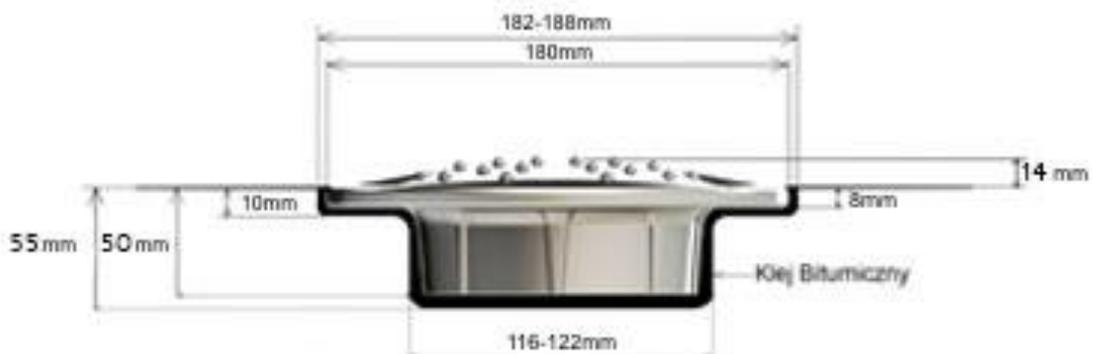
**1. Technical information S-3LED**

<b>Product name</b>	S-3 LED
<b>Type of product</b>	Plough-resistant. High mechanical impact resistance.
<b>Technical specification - Reflector</b>	
<b>Type of reflector</b>	P3A (R1- R3), reflective film 3M I or II generation
<b>Conformance with standard</b>	PN EN 1463-1:2009
<b>Certificate</b>	ITB-259/W
<b>Number of LEDs</b>	1 at the front + 1 at the back
<b>Reflected light luminance factor</b>	PRP1>250mcd/lux
<b>LED light visibility</b>	min. 100 m
<b>Horizontal angle of beam</b>	max 60° (optionally diodes with an angle of 15°, 30° and 40°)
<b>Photovoltaic Panel (PVP)</b>	polycrystalline
<b>PVP lifespan</b>	Up to 9 000 cycles / 25 years
<b>Light conformance with standard</b>	Technical Approval No. AT/216-02-3306
<b>Automatic LED Activation System (ALAS)</b>	Automatic by 30 lux daylight
<b>Type of battery</b>	Akku Eneloop 1,2 V 2000 mAh 1 or 2 pcs
<b>Charging time</b>	45 min
<b>Operation time</b>	710 h with 1 piece
<b>Temperature resistance</b>	From -35°C up to + 135°C
<b>Tightness</b>	IP 68
<b>Material</b>	High-impact colourless PC
<b>Compression resistance</b>	> 180 kN
<b>Colour of double sided reflector</b>	<ul style="list-style-type: none"> <li>• white-white</li> <li>• white-red</li> <li>• yellow-yellow</li> <li>• green-green</li> <li>• blue-blue</li> <li>• other colours on request without certificate</li> </ul>



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<b>Colour of one sided reflector</b>	<ul style="list-style-type: none"> <li>• white, red</li> <li>• yellow</li> <li>• green</li> <li>• blue</li> <li>• other colours on request without certificate</li> </ul>
<b>Technical specification - Cast iron cover</b>	
<b>Shape</b>	Flat mushroom-shaped
<b>Gross weight of iron cover including reflective insert</b>	3,2 kg
<b>Height (above the road)</b>	14 mm
<b>Depth (under the road)</b>	47 mm
<b>Diameter (the part above the road)</b>	180 mm
<b>Diameter (the part under the road)</b>	110 - 120 mm (cone)
<b>Compression resistance</b>	>250 kN
<b>Cast iron cover lifespan</b>	10 years
<b>Installation guidelines</b>	
<b>Tools</b>	Milling machine with a special shaped cutter mounted on a trailer or small portable water-cooled drilling equipment
<b>Higher slot diameter</b>	182 (max.188 mm)
<b>Lower slot diameter</b>	116 (max.122 mm)
<b>Higher slot depth</b>	10 mm (for diameter of 180mm)
<b>Lower slot depth</b>	52 mm
<b>Installation in asphalt surface</b>	Bitumen adhesive in temp.160 - 180°C
<b>Adhesive consumption</b>	Up to 0,48 kg
<b>Installation in concrete road surface (dry)</b>	Epoxy or polyurethane adhesive (cold).



## 2. Product advantages

S-3LED is an active road stud of the Sniezka group (plough-resistant) equipped with cast



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iron cover. Its main advantages are:

- high cast iron cover resistance against wear by abrasion and ploughs in winter time,
- high reflector resistance against wear by abrasion caused by tires,
- self-cleaning system activated during rainfall. S-3LED does not collect water, ice or dirt in front of the reflector as it has a 1% run-off,
- automatic LED Activation System (ALAS) which automatically turns on (sunset) and turns off (sunrise) the LED lights,
- energy-saving system and fast battery charging time up to 45 min with photovoltaic panel,
- long-lasting LED light up to 700 hours (without battery charging),
- anti-slip protection for single-tracks vehicles such as motorcycles,
- gentle ramp for the wheels of vehicles as well as road maintenance machines (for instance ploughs) at each side which guarantees trouble-free driving,
- “alert” system acting as acoustic warning when crossing the road marking line.

### 3. Recommendations

S-3LED is recommended for the marking of highly dangerous main roads and motorways:

- dangerous curves with poor visibility (horizontal and vertical),
- fading traffic lanes, possibly accompanied by areas closed to traffic,
- speed bumps.
- pedestrian crossings.