

# Operating Instructions Ex LED Linear Luminaire

(Before start-up, please, study carefully)



State: 23.06.2023




## Technical Data:

Type	Nominal Voltage	Frequency	Lamp Wattage Adjustable	Current Consumption approx.	Nominal Lumen Output at 5000K
BS52***-LED	230 V AC	0-50/60 Hz	Up to 30 W	0.13 A	3360 lm
BS55***-LED			Up to 60 W	0.26 A	6720 lm
BS92***-LED			Up to 75 W	0.33 A	8400 lm


## Dimensions and Weights:

Length approx. 735 | 1340 | 1640 mm  
Width approx. 183 mm  
Height approx. 130 mm  
Weight approx. 5.9 - 12 kg (depending on model)

## Type of Explosion Protection:

 II 2G Ex db eb op is IIC T5 Gb

EN IEC 60079-0 : 2018  
EN 60079-1 : 2014

 II 2G Ex db eb op is IIB T5 Gb

EN IEC 60079-7 : 2015 / A1:2018  
EN 60079-28 : 2015

 II 2D Ex tb op is IIIC T 100° Db

EN 60079-31 : 2014

General Requirements  
Flameproof Enclosure "d"  
Increased Safety "e"  
Equipment Using Optical Radiation "op is"  
Protection By Enclosure "t"

Directive 2014/34/EC

## EC Type Examination Certificate:

IBExU 20 ATEX 1012

## Degree of Enclosure Protection:

EN 60529

min. IP 64

## Ambient Temperature Range:

$-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}^*$

Without throughwiring

$-20^{\circ}\text{C} \leq T_a \leq +30^{\circ}\text{C}^*$

With throughwiring (max. 10 A)

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## **Installation and Operation:**

The linear luminaires may be installed in any position. Installation material for mounting is provided with the delivery of the luminaires. The terminal compartments are located beneath the sliding plates near the luminaire heads. In there are terminal boards or modular mini-terminals with optional throughwiring (min. 5 x 2.5 mm<sup>2</sup>, loadable up to 10 A). The mains power supply line (min. 3 x 1 mm<sup>2</sup>, max. 5 x 2.5 mm<sup>2</sup>) is fed through a cable entry (torque 8 Nm) into the enclosure and is connected to the relevant terminal board (torque for M 4: 1.2 Nm) or to the mini-terminals (torque for M 3: 0.5 Nm) according to the enclosed terminal diagram. For external wiring, exclusively cables with a minimum temperature stability of 70 °C have to be used. Coming from the other terminal board or the other mini-terminals and going through the second cable entry, the wiring may be led out for connection of additional luminaires or other electrical equipment. One terminal of the terminal boards serves as connector for protective ground connectors.

The entry openings of the luminaire enclosure:

Min. 2 internal threads M 16, M 20, oder M 25 x 1.5 (for screwed-in cable entries)

Through bore 9.1 mm (for external protective ground connection [in metal enclosures])

In luminaire versions with integrated plug and socket connectors the internal wiring is already installed by the manufacturer. External wiring is provided by means of cables also equipped with plug and socket connectors.

**ATTENTION: Always connect the plug side of the luminaire first! Only thereafter the socket side!**

## **Starting Operation:**

Mounting exclusively has to be done by suitably qualified staff. For improper handling and for consequential damages we do not assume any liability.

Before starting operation of the luminaires care must be taken that the terminals of the connecting cables are tightened properly and the enclosure is tightly closed (check cover and attached components).

### **Attention!**

- ! Before starting operation store the luminaires in a dry place protected against moisture!**
- ! Do not disconnect plug and socket connectors while under voltage!**
- ! Connecting of protective ground conductors with ring cable lugs 4 mm<sup>2</sup> only!**
- ! After opening a luminaire that is still connected to the mains power supply the microswitch must not be pressed!**
- ! Avoid electrostatic charge! Cleaning of luminaires only with damp cloth!**
- ! When operating the luminaires the regulations of EN 60079-14 "Explosive Atmospheres - Part 14: Electrical Installations Design, Selection and Erection" have to be regarded.**

<p>BöSha Technische Produkte GmbH &amp; Co. KG – Heidberg 21 – 59602 Rүthen Tel. 0049-(0)2952-97091-0 – Fax 0049-(0)2952-97091-150 – Email <a href="mailto:info@boesha.de">info@boesha.de</a> – Homepage <a href="http://www.boesha.de">http://www.boesha.de</a> Registering Court: Amtsgericht Arnsberg HRA 3499 Partner: BöSha Technische Produkte Verwaltungs-GmbH – Registering Court: Amtsgericht Arnsberg HRB 2791 Managing Director: Markus Alz</p>
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### Repair:

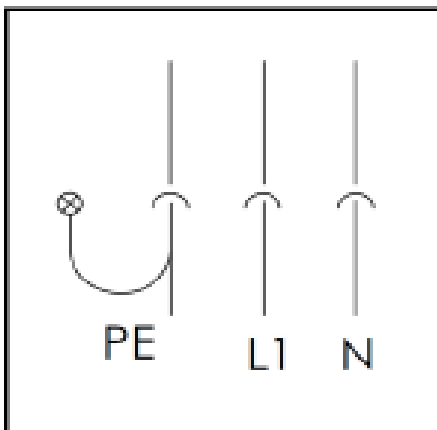
-Defect luminaire components, for example LED modules, LED control gear etc., may only be repaired or exchanged by the manufacturer.

-Only components being certified for potentially explosive atmospheres of group II (cable entries, plug and socket connectors, line end units etc.) may be attached to the luminaires. When installing and operating the luminaires the IP degree of enclosure protection is only ensured by proper application of tested and certified explosionproof cable entries, plug-in connectors or other certified attachments. The instructions and conditions stated in the EC type examination certificates for Ex-components being installed in or attached to the luminaires have to be regarded.

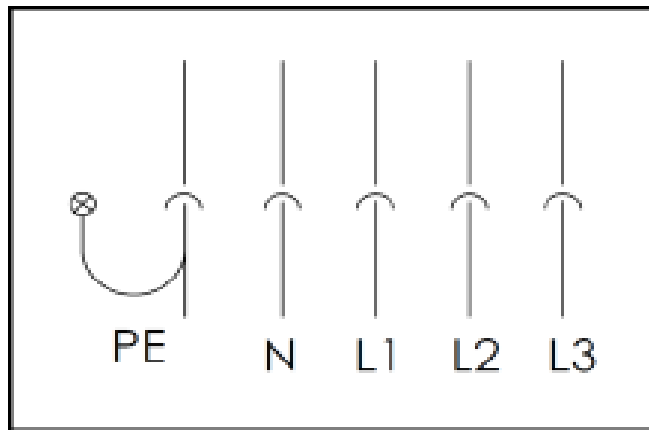
-When installing and operating the specifications for dust explosion protection stated in EN 60079-31 have to be observed. In particular, the ignition temperature of the dust-air mixture respectively the smoulder temperature of the dust in question in compliance with the safety factor stated in EN 60079-31 must be higher than the maximum surface temperature of the luminaires.

**Operators are not allowed to perform any setting changes and/or repairs of the devices and the cables!**

**Defect devices may only be repaired by the manufacturer!**



Single-sided wiring



Throughwiring

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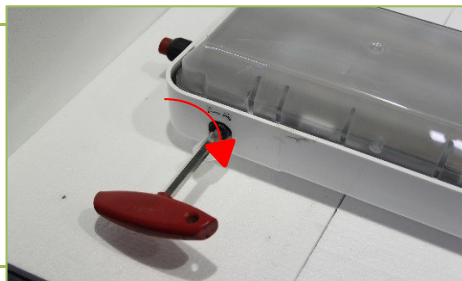
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### Opening and Closing the Luminaire:

1. Open the sealing cap.
2. Open the luminaire cover acc. illustration, with Allen key (size 10 across flats).



3. Gently lift the cover to the rear.
4. Disengage the locking pin shown by using a slotted screwdriver.



5. In order to lift up the LED module lever the entire module approximately 1 cm to the right by applying the slotted screwdriver at the circled area. Watch out that you do not break off the module holder indicated by the red arrow.



6. Gently lift the assembly by max. 10° (10 cm) and pull it to the right and then remove the LED module.



7. The released module can now be lifted to the rear and be put in the cover.
8. For closing the luminaire repeat the steps shown in reverse order.



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## Type Identification Key:

### Ex II / III – Type Identification Key

<u>BS</u>	<u>**</u>	<u>*</u>	<u>*</u>	<u>**</u>	<u>LED</u>
	↓	↓	↓	↓	
					<u>Max. Number</u>
					<u>LED Modules (COB) / Power Adjustable / Lumen Output at 5000 K</u>
					52 - 2 / up to 30 Watt / 3360 lm (735 x 183 mm)
					55 - 4 / up to 60 Watt / 6720 lm (1340 x 183 mm)
					92 - 5 / up to 75 Watt / 8400 lm (1640 x 183 mm)
					<u>Enclosure</u>
					5 - Aluminium profile with headpieces of plastic
					6 - Steel sheet
					7 - Stainless steel sheet
					8 - Aluminium sheet, plastic powder coated
					9 - Plastic profile with headpieces of plastic (for luminaires up to 1340 mm length)
					<u>Connections: Bores/Sleeves with Blind Plugs</u>
					1 - 2x M 16 x 1.5
					2 - 2x M 20 x 1.5
					3 - 2x M 25 x 1.5
					<u>Connections: Plug-In Connectors</u>
					4 - Plug/socket
					5 - Plug/socket with line end unit
					6 - Socket/plug with line end unit
					7 - Plug 1x M 36 x 1.5
					8 - Socket 1x M 36 x 1.5
					9 - Plug with line end unit / 1x M 36 x 1.5
					0 - Socket with line end unit / 1x M 36 x 1.5
					<u>Special Versions</u>
					00 - No special version (IIB-LED module; riveted, lenses non-bonded)
					01 - IIC-LED module; riveted or screwed, lenses bonded
					02 - 00 with throughwiring
					03 - 01 with throughwiring
					07 - Luminaire for pole mounting

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## EU Declaration of Conformity:



### EU-Konformitätserklärung

EU Declaration of Conformity

IBExU 20 ATEX 1012

Déclaration de conformité

<b>Wir / We / Nous,</b>		<b>BöSha Technische Produkte GmbH &amp; Co. KG</b> <b>Heidberg 21</b> <b>59602 Rülthen (Germany)</b>
<b>erklären in alleiniger Verantwortung, dass das Produkt</b> <i>bearing sole responsibility, hereby declare that the product</i> déclarons de notre seule responsabilité que le produit		<b>Langfeldleuchte Typ BS ***** LED</b>  <i>Luminaire Type BS ***** LED</i>  <i>Luminaire type BS ***** LED</i>
<b>auf das sich diese Erklärung bezieht, mit den folgenden Normen oder normativen Dokumenten übereinstimmt:</b> <i>referred to by this declaration is in conformity with the following standards or normative documents:</i> auquel se rapporte la présente déclaration est conforme aux normes ou aux documents normatifs suivants:		
<b>Bestimmungen der Richtlinie</b> <i>Provisions of the directive</i> Désignation de la directive	<b>Titel und/oder Nr. sowie Ausgabedatum der Norm(en)</b> <i>Title and/or no. and date of issue of the standard(s)</i> Titre et/ou no. ainsi que date d'émission de la/des norme(s)	
2014/34/EU: Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen  <i>2014/34/EU: Equipment and protective systems intended for use in potentially explosive atmospheres</i>  2014/34/UE: Appareils et systèmes de protection destinés à être utilisés en atmosphères explosibles	EN IEC 60079-0:2018 EN 60079-1:2014 EN IEC 60079-7:2015/A1:2018 EN 60079-28:2015 EN 60079-31:2014	

Rülthen, den 23. Juni 2023 <i>Ort und Datum</i> <i>Place and date</i> <i>Lieu et date</i>	<b>BöSha Technische Produkte GmbH &amp; Co. KG</b> <i>(i. A. Ulrich Matthias)</i>
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Commercial Register: Amtsgericht Arnsberg HRA 3499 and HRB 279

Managing Director: Markus Alz

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