



# Ex-Searchlight in LED Technology SEB 10

(Zone 1, 2, 21, 22)

## The all-rounder for harsh and hazardous areas

For inspection-, maintenance & repair in industrial areas with harsh & hazardous areas we offer you the SEB 10 searchlight in LED technique. This searchlight can be used in most gas-Ex and dust-Ex areas. Also the SEB 10 is suitable for control and rescue operations of fire departments and emergency services of all kind. The emergency light function even offers you the use of this powerful searchlight as an emergency lighting.

#### Technique for your safety

This extremely robust and bright searchlight with the high degree of protection IP 66 is ideally suited for use in all work areas with high mechanical requirements and a humid environment.

Reliably it supplies a light output even after 5.5 hours operating time. This is ensured by the two high-performance LEDs and the powerful maintenance-free lithium iron phosphate battery pack.

#### Don't get left in the dark

Five LEDs supply information on the current operation and charge status at all times.

Thus, the SEB 10 shows you in good time whether the battery is discharged or charged, or if it needs to be replaced.

In addition, the circuit protects the electronics against deep discharge and overcharge- only the energy actually consumed is recharged. This increases the lifetime of the battery. So that the user does not get left in the dark, the searchlight has a safety electronic, which automatically reduces the luminous flux down to 50 %. This generates a safety buffer of up to 60 minutes to leave the danger area.

#### Search and working light

The SEB 10 searchlight offers a searchlight function which is suitable for inspection and control tasks in hazardous areas.

The new searchlight-boost for more light intensity in the distance increases the luminous flux of up to 150 %.

Especially for applications where a consistent working light is required, the work light with a radiation angle of 22° provides a square-shaped illumination with an even light distribution- without significant losses

By fitting coloured slip-on filters they can be used also for signalling purposes.

### Approvals and test certificates

This searchlight is the only one of this kind to meet the construction and test standards listed below; they have been issued with the following approvals and test certificates:

- DIN14642 (German Institute for Standardisation) for explosions protected hand lamps with motor vehicle charger, edition 7/2011, for equipping fire brigade vehicles.
- EC Type Examination Certificate for explosion protection in explosive gas and dust atmospheres (ATEX Certificate)
- EWG type approval of the Federal Office for Motor Vehicles for meeting the requirements of the EMC Directive 95/54/EC for use in motor vehicles (e1 certificate) \*)
- Shock test report according to DIN EN 60068-2-27 for the use of the light fittings in fire brigade vehicles (DIN 1846-2:2001) \*)

\*) in preparation



#### Features

- Compatible with existing chargers and accessories for SEB
- 2-Lens system for optimised light distribution (search/working light)
- Searchlight boost circuit for temporary increase of the luminous flux up to 150 %
- Lithium iron phosphate battery with high energy density for a long lifetime
- Safety circuit and decrease of the luminous flux down to 50 % in case of low capacity. This generates a safety buffer of up to 60 minutes.

#### Ordering details

| 1     |  |
|-------|--|
|       |  |
| Ma 19 |  |

| Туре   | Scope of delivery                                                      | Order unit | Order-No.      |
|--------|------------------------------------------------------------------------|------------|----------------|
| SEB 10 | with twin-lens high power LED system<br>Lithium-Iron-Phosphate battery | 1          | 1 1147 000 820 |
|        | (rechargeable with LG 443 or motor vehicle cha                         | rger 90)   |                |
|        |                                                                        |            |                |



| SEB 10 L | with twin-lens high power LED system lithium-iron-phosphate battery | 1 | 1 1147 000 810 |
|----------|---------------------------------------------------------------------|---|----------------|
|          | (rechargeable directly via mains lead,                              |   |                |
|          | with LG 443 or motor vehicle charger 90)                            |   |                |



| Set with mains charger | Complete package SEB 10 incl. charger LG 443 | 1 | 1 1147 443 820 |
|------------------------|----------------------------------------------|---|----------------|



| Set with              | Complete package SEB 10 incl. motor vehicle | 1 | 1 1147 792 820 |
|-----------------------|---------------------------------------------|---|----------------|
| motor vehicle charger | charger 90                                  |   |                |



| Set with mains charger    | Complete package SEB 10 incl. charger LG 443 | 1 | 1 1147 924 820 |
|---------------------------|----------------------------------------------|---|----------------|
| and motor vehicle charger | and motor vehicle charger 90                 |   |                |



| Set with slip-on filter | Complete package SEB 10 incl. coloured slip-on filter 1 | 1 1147 300 820 |
|-------------------------|---------------------------------------------------------|----------------|
|-------------------------|---------------------------------------------------------|----------------|

#### **Accessories**



| Туре                         | Content                         | Application    | Order unit | Order No.      |
|------------------------------|---------------------------------|----------------|------------|----------------|
| LG 443 mains charger         | 220 V- 250 V AC                 | for SEB 8/9/10 | 1          | 1 1540 000 443 |
| Motor vehicle charger KFZ 90 | Charger 10 V- 33 V DC           | for SEB 8/9/10 | 1          | 1 1145 000 792 |
| Wall bracket SW              | Console without charging module | for SEB 8/9/10 | 1          | 1 1145 000 795 |



| Set slip-on filters | red, orange, green | for SEB 8/9/10 | 1 | 2 1147 300 000 |
|---------------------|--------------------|----------------|---|----------------|





#### **Technical data**

|                                        | SEB 10                                                                                             | SEB 10 L                                                                                                                                           |
|----------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| EC-Type Examination Certificate        | BVS 15 ATEX E122                                                                                   | BVS 15 ATEX E122                                                                                                                                   |
| Marking accd. to 2014/34/EU            | <ul><li>II 2 G Ex d e ib mb IICT4 Gb</li><li>II 2 D Ex tb IIICT85 °C Db</li></ul>                  | <ul><li></li></ul>                                                                                                                                 |
| Permissible ambient temperature        | -20 °C up to +40 °C, specified data 0 °C up to +30 °C (battery)                                    | -20 °C up to +40 °C, specified data 0 °C up to +30 °C (battery)                                                                                    |
| Battery                                | 9.6 V / 3 Ah rechargeable LiFePO <sub>4</sub> battery                                              | 9.6 V / 3 Ah rechargeable LiFePO <sub>4</sub> battery                                                                                              |
| Rated voltage (charger)                | -                                                                                                  | 230 V AC                                                                                                                                           |
| Frequency (charger)                    | -                                                                                                  | 50- 60 Hz                                                                                                                                          |
| Charging duration                      | max. 8 h (depends on the state of charge)                                                          | max. 8 h (depends on the state of charge)                                                                                                          |
| Rated operating duration (main light)  | 5.5 h                                                                                              | 5.5 h                                                                                                                                              |
| Switch                                 | Flashing light – Working light – OFF – Search light –<br>Boost function search light (max. 10 min) | Flashing light – Working light – OFF – Search light –<br>Boost function search light (max. 10 min)                                                 |
| Protection class                       | III                                                                                                | /                                                                                                                                                  |
| Lamp / Illuminant                      | 2 high efficiency LED-Systems                                                                      | 2 high efficiency LED-Systems                                                                                                                      |
| Rated luminous flux                    | 230 lm (search light)/ 365 lm (search light boost function)                                        | 230 lm (search light)/ 365 lm (search light boost function)                                                                                        |
| Max. luminous intensity                | 12000 cd (search light)<br>19000 cd (search light boost function)<br>1000 cd (working light)       | 12000 cd (search light)<br>19000 cd (search light boost function)<br>1000 cd (working light)                                                       |
| Dimensions (L xW x H)                  | 325 x 119 x 146.5 mm                                                                               | 325 x 119 x 146.5 mm                                                                                                                               |
| Function                               | ,                                                                                                  | microprocessor-controlled operating period indication, capacity-dependent charge, flashing light, emergency light, back-up light when low capacity |
| Charging option                        | with LG 443 or motor vehicle charger 90                                                            | directly with mains cord, with LG 443 or motor vehicle charger 90                                                                                  |
| Enclosure colour                       | black                                                                                              | black                                                                                                                                              |
| Enclosure material                     | Polyamide                                                                                          | Polyamide                                                                                                                                          |
| Weight                                 | 1.55 kg                                                                                            | 2.1 kg                                                                                                                                             |
| Light aperture                         | Ø 98 mm, mineral glass                                                                             | Ø 98 mm, mineral glass                                                                                                                             |
| Degree of protection accd. to EN 60529 | IP66                                                                                               | IP66                                                                                                                                               |
| Scope of delivery                      | with twin-lens LED-system and battery                                                              | with twin-lens LED-system, battery and internal charger unit,                                                                                      |

# Technical data / Dimension drawings / Range-diagram Charger/wall bracket for SEB 10 / SEB 10 L

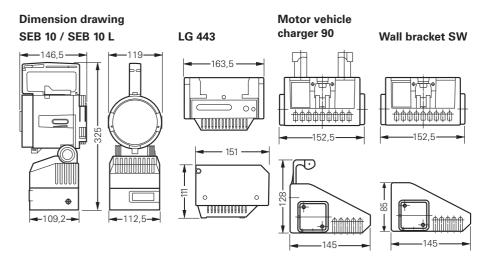




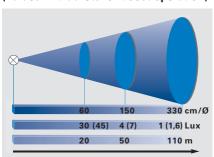


#### **Technical data**

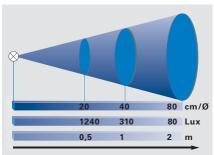
|                                        | Mains charger LG 443 for SEB 10/9/8 | Motor vehicle charger KFZ 90 for SEB 10/9/8 | Wall bracket SW for SEB 10/9/8 |
|----------------------------------------|-------------------------------------|---------------------------------------------|--------------------------------|
| Permissible ambient temperature        | -0 °C up to +30 C                   | -0 °C up to +30 C                           | -20 °C up to +40 C             |
| Rated voltage                          | 220- 250 V AC                       | 10- 33 V DC                                 |                                |
| Frequency                              | 50- 60 Hz                           |                                             |                                |
| Protection class                       | II                                  | III                                         |                                |
| Dimensions (L x W x H)                 | 163.5 x 151 x 111                   | 152.5 x 145 x 128                           | 152.5 x 145 x 85               |
| Enclosure colour                       | black                               | black                                       | black                          |
| Enclosure material                     | ABS                                 | ABS                                         | ABS                            |
| Weight                                 | 1.3 kg                              | 0.65 kg                                     | 0.55 kg                        |
| Degree of protection accd. to EN 60529 | IP31                                | IP31                                        |                                |



Range-diagramm SEB 10 searchlight (Values in brackets for boost operation)



SEB 10 working light





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#### U.S. (Global Headquarters): Eaton's Crouse-Hinds Division

1201 Wolf Street Syracuse, NY 13208

(866) 764-5454 FAX: (315) 477-5179 FAX Orders Only: (866) 653-0640

CrouseCustomerCTR@Eaton.com

#### For more information:

If further assistance is required, please contact an authorized Eaton Distributor, Sales Office, or Customer Service Department.

#### **Australia**

Phone +61-2-8787-2777 Fax +61-2-9609-2342 crousehindsanz@eaton.com

#### China

Phone +86-21-2899-3600 Fax +86-21-2899-4055 ECHsales@eaton.com

#### **Great Britain**

Phone +44-247-630-89 30 Fax +44-247-630-10 27 sales5@eaton.com

#### India

Phone +91-124-4683888 Fax +91-124-4683899 cchindia@eaton.com

#### Canada

Toll Free +1-800-265-0502 Fax +1-800-263-9504 Fax orders only: +1-866-653-0645

#### Korea

Phone +82-2-3484-6783 Fax +82-2-3484-6778 CCHK-sales@eaton.com

#### Mexico/Latin America/ Caribbean

Phone +52-555-804-4000 Fax +52-555-804-4020 ventascentromex@eaton.com

#### **Spain**

Phone +34-9-37362710 Fax +34-9-37835055 sales.CCH.es@ cooperindustries.com

#### Middle East (Dubai)

Phone +971-4-427-2522 / 2500 Fax +971-4-429-8521 CHMEsales@eaton.com

#### The Netherlands

Phone +31-10-2452145 Fax +31-10-2452121 CHRD\_mail@eaton.com

#### Norway

Phone +47-32-244600 Fax +47-32-244646 CHLloffice@eaton.com

#### Singapore:

Phone +65-6645-9888 Fax +65-6297-4819 CHSI-Sales@eaton.com

#### Turkey

Phone +90-216-464-20-20 Fax +90-216-464-20-10 infoEGTurkey@eaton.com

#### Russia

Phone +7-495 510-24-27 Fax +7-495 510-24-28 info@cooper.ru.com www.cooper-russia.ru

**Eaton's Crouse-Hinds Division** Neuer Weg – Nord 49 D-69412 Eberbach

Phone +49 (0) 6271/806-500 Fax +49 (0) 6271/806-476 E-mail info-ex@eaton.com Internet www.crouse-hinds.de



1000 Eaton Boulevard Cleveland, OH 44122 United States Eaton.com

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