

Type Approval Certificate



This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. **13 683 - 99 HH**

Company **Pfannenberg GmbH
Werner-Witt-Straße 1
21035 Hamburg, GERMANY**

Product Description **Electronic, Optical Alarm Units**

Type **ABL/ABS, ABL-DM, PMB 2010, WBL/WBS, WBLR/WBSR, WBL-Ü, WBS-Ü, PMF 2020, DWBL/DWBS**

Environmental Category **C, EMC1**

Technical Data /
Range of Application **Type ABL/ABS, ABL-DM: Flashing alarms 15 joules
- Light intensity: 214 candela (ABL-DM: 137 candela)
- Nominal voltage type ABL: 230/127/110/48/42/24V AC,
ABL-DM: 110V AC
ABS:12/24/48/60V DC
- Material globe: Polycarbonate (PC)
housing: Aluminium (Al Mg Si 1)
- Degree of protection: IP54

Type PMB 2010: Flashing light 10 joule (three different flashing combinations)
- Light intensity: 44 candela
- Nominal voltage: 230/110V AC, 24/48V DC
- Material globe: Acrylic glass, Polycarbonate (PC)
housing/base: ABS
- Degree of protection: IP55**

Test Standard **Guidelines for the Performance of Type Approvals, Chapter 2, Edition 2003**

Documents **Test reports: EMV-Services 97/7102-1, 98/8027-3-1, 3-3, -4-1, -9, -10, -11;
RMS 48/2/91-1, 3-12/98; Hansecontrol L0270, 0272, 0273-95; WTD71-222-21/90;
Data Sheet 075000044; Circuit diagrams acc. to submitted file**

Remarks **None**

Valid until **2014-01-14**

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File No. **I.A.06**

Hamburg, 2008-12-09

Germanischer Lloyd

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Further Technical Data / Range of Application

Type KBL, WBL/WBS, WBLR/WBSR, WBL-Ü, WBS-Ü: Warning lights 5 joules

- Light intensity: 44 candela
- Nominal voltage type WBL, WBLR, KBL: 230/110/48/42/24V AC,
 WBL-Ü: 230/42V AC
 WBS, WBSR, KBL: 12/24/48/60/80/110 V DC (110V DC not for KBL)
 WBS-Ü: 12/24/48V DC
- Material globe: Polycarbonate (PC)
 housing: Aluminium (Al Mg Si 1), for type WBLR and WBSR: Polycarbonate (PC)
- Degree of protection: IP54 (type WBLR and WBSR IP 65)

Type PMF 2020: All-Round flashing light 7 joules (three different flash patterns)

- Nominal voltage: 230/110V AC, 12/24V DC
- Material globe: Polycarbonate (PC)
 housing: ABS
- Degree of protection: IP54

Type DWBL/DWBS: Warning lights 2,5 joules

- Light intensity: 7,8 candela
- Nominal voltage type DWBL: 230/110/48/42/24V AC,
 DWBS: 12/24/48/60/80 V DC
- Material globe: Polycarbonate (PC)
 housing: Aluminium (Al Mg Si 1)
- Degree of protection: IP54

Flash sequency: 1Hz = 60 flashes/min

Duty cycle: 100%

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