

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Peripheral Equipment**

with type designation(s)
PROTECT-Series / PRO 10 and PRO L 10

issued to

Pfannenberg GmbH
Hamburg, Germany

is found to comply with

IMO A.1021(26) Code on alerts and indicators (2009)

DNV rules for classification – Ships, offshore units, and high speed and light craft

IMO International Code for Fire Safety Systems (FSS Code) Chapter 9

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes:

Temperature	D
Humidity	B
Vibration	A
EMC	B
Enclosure	B (PRO L 10) / C (PRO 10)

Issued at **Hamburg** on **2026-07-06**

This Certificate is valid until **2031-07-05**.

DNV local unit: **Hamburg – CMC North/East**

Approval Engineer: **Heinz Scheffler**



for **DNV**

Digitally signed by: Dariusz Lesniewski
Location: DNV SE, Germany

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

The alarm device family "PRO 10" consists of acoustical devices (PRO 10) and combined acoustical and visual devices (PRO L 10). Both are available for low voltage DC and high voltage AC applications.

Technical Specification PRO 10 / PRO L 10	
General specification	
Max. sound level /	116 dB (A) @1m
Volume control	- 4 dB -10 dB -16 dB - 22 dB - 26 dB -30 dB by DIP switch setting or external control
Tones	80, of which 3 are externally controllable Incl. call waveforms of Code on Alerts and Indicators, 2009 Table 7.2
Light source	PRO L 10: LED, Light intensity 23 cd (transparent)
Duty cycle	100 %
Connecting terminals	0.14 - 2.5mm ² fine stranded / AWG24 - AWG 14; 4 mm ² solid / AWG12
Protection category (Enclosure)	IP 66 (EX) / IP 67 The degree of protection and Explosion-protected depends on the cable glands and sealing plugs used.
Operating temperature	- 40 °C to 55 °C
Cable inlet	2x M20 x 1.5
Rated voltage	12 - 48 V DC; 115 - 230 V AC
Housing material / Lens material	Aluminum / PC
Installation attitude	Any (Sound funnel must not face upwards after assembly of the device)

Nomenclature PRO 10 and PRO L 10 Item number: 231 aa bb c ddd		
a Type	50 51	PRO 10: sounder PRO L 10: sounder LED combined device
bb Rated Voltage	63 64	12 - 48V DC 115 - 230V AC
c Visual Signal Color	0 1 2 3 4 5 6 7 8	None – Sounder only Clear White Yellow Orange Red Green Blue RGB
ddd Option / Design	001 038 008 502	Housing RAL3000 (red), Standard Special Tones Ex Certified Special Housing Color
Position ddd can obtain different numbers for fitting variations based on above coded items but no configuration changes are permitted that affect this TAA approval!		

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case.

Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified / recognized Certification Body.

Regular testing and maintenance: Testing must be carried out in accordance with MSC.1/Circ.1432 and the manufacturer's maintenance instructions.

Type Approval documentation

Document No	Rev.	Title
S7256-Test Record	31.10.2025	UL_02_Flame_Test
586200008	i	Operation Manual
30454-080-4	a	Bill of Material (BOM)
30454-084-1	a	List of Drawing Documents
30454-100	01-A	Drawing of PRO 10 and PRO L 10
221341-AU01+UCE01-PB01	06.02.2025	EN54-3 EMC Test Report PRO 10 DC
221341-AU03+UCE01-PB01	31.01.2025	EN54-3 EMC Test Report PRO 10 AC
221341-AU01+BZA01-PB01	26.08.2025	EN54-3 ENV & Functional Test Report
25090-5-R00	10.11.2025	Conducted Emission Test Report PRO L 10 AC
235-26	2	IEC 60092-504 EMC Test Report PRO L 10 (PRO 10)
170-26	2	IEC 60092-504 ENV Test Report PRO L 10 (PRO 10)

Tests carried out

Applicable tests according to:

- Class Guideline DNV-CG-0339, Edition August 2021
- EN 54-3:2014 incl. A1:2019
- IEC 60092-504:2016
- IEC 60533:2015

Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Product order number

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE