



Certificate No:
TAE000049Z

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Light Fitting

with type designation(s)
GRP Linear Series

Issued to

Dialight Corporation
Farmigdale, NJ, USA

is found to comply with

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

Application :

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

Vibration class	A
Degree of protection	IP 66/67
Temp. class	D
Voltage (V)	See Page 2
Suitable for Hazardous areas	See Page 2

Issued at **Hamburg** on **2021-05-05**

This Certificate is valid until **2026-05-04**.

for **DNV**

DNV local station: **Houston**

Approval Engineer: **Maik Gagern**

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Arne Schaarmann
Head of Section

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 300,000 USD.



Form code: TA 251

Revision: 2021-03

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Product description*

LED Lighting Fixture

Standard Model for Zone 1, 2, 21 & 22 *

Type	Max. Wattage	Voltage
P2A XXX 2 X A XXXX N	29 W	100-277 VAC/120-250 VDC
P4A XXX 2 X A XXXX N	51 W	100-277 VAC/120-250 VDC
Explosion Protection	Ex II GD	Ex eb mb op is IIC T4 Gb
		Ex tb op is IIIC T130°C Db

Standard Model for Zone 2, 21 & 22 *

Type	Wattage	Voltage
P2B XXX 2 X A XXXX N	29 W	100-277 VAC/120-250 VDC
P4B XXX 2 X A XXXX N	51 W	100-277 VAC/120-250 VDC
Explosion Protection	Ex II 3 GD	Ex ec IIC T4 Gc
		Ex tc IIIC T130°C Dc
	Ex II 2 D	Ex tb op is IIIC T130°C Db

Emergency Backup Model for Zone 1, 2, 21 & 22 *

Type	Wattage	Voltage
P4A XXX G X A XXXX F	51 W	230/240 VAC
Explosion Protection	Ex II 2 GD	Ex eb mb op is IIC T5 Gb
		Ex tb op is IIIC T95°C Db

Emergency Backup Model for Zone 2, 21 & 22 *

Type	Wattage	Voltage
P4B XXX G X A XXXX F	51 W	230/240 VAC
Explosion Protection	Ex II 3 GD	Ex ec IIC T5 Gc
		Ex tc IIIC T95°C Dc
	Ex II 2 D	Ex tb op is IIIC T95°C Db

Numbering Principle			
Digit	1&2	Product series	
			P2 - Polymeric Universal Linear 2ft
			P4 - Polymeric Universal Linear 4ft
	3	Certification	E - CE / ENEC / RCM
			A - ATEX / IECEx Zone 1, 21
			B - Atex / IECEx Zone 2, 21 and 22
	4	Lens options	
	5	Optics	
	6	Colour and / or colour temperature	
	7	Operating Voltage	1 - 110 / 120 VAC

			2 - 100-277 VAC/120-250 VDC (230 / 240 VAC for Emergency) Integrated Driver
			G - 230 / 240 VAC
	8	Lumen output range	
	9	Controls	A = DALI, D = Dimming
	10	Mounting options	
	11	Hardware / Cable options for connection	
	12	Electrical options	W = Standard
	13	Finish	G = Grey
	14	Battery Backup	N - Standard
			F = Emergency 90 min. 4ft only
			G = Emergency 180 min. 4ft only

Digits 4, 5, 6, 8, 10, 11 and 13 are not relevant for technical evaluation wrt. the certification.

Application/Limitation

Maker's instructions are to be observed.

*Note: All details about electrical explosion protection mentioned in this certificate are for information only. For relevant binding information the corresponding Certificate of Conformity with regard to electrical explosion protection, issued by a recognised Authority, shall be observed.

Location Classes:

Vibration: A

Humidity: B

Temperature: D

EMC: A

Type Approval documentation

Tests carried out

Applicable tests according to DNVGL Class Programme DNVGL-CP-0398, Edition December 2015

EMC testing acc. to DNVGL Guideline DNVGL-CG-0339, Edition November 2019

Marking of product

The products to be marked with:

- Manufacturer name
- Model name
- Serial number
- Power supply ratings
- Degree of protection
- Electrical explosion protection: Type of protection and marking according to the applicable Certificate of Conformity *

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation



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- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and 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