

Technor TNAML- 80.000 hour maintenance free fluo fixture
Technor RMS Fluorescent fixtures
Glamox MIX-Z Fluorescent fixtures
Glamox Max-Z Fluorescent fixtures

TECHNO
BENELUX
Built for safety & durability


rmn
 Repair Management Nederland B.V.
 More management less firefighting

Techned TNAML maintenance free luminares

A 10 years operational warranty gives low lifecycle cost* (conditions apply)

100% encapsulated. Maintenance free solution requiring only visual inspection from EX point of view.

Easy and flexible installation

Seawater resistant anodized aluminium.

Tempered glass. Fully recyclable.

Fully recyclable

High light efficiency (80%)

Available with 2x18W / 2x36W / 2x58W lamps

Optional incorporated battery powered LED emergency lighting

Sealed-for-life concept fit and forget.

Patented design

Vibration test.

Vibration tested by Thales

Standard IEC60721-2-3 Ed 1.0 and IEC68-2-6

Frequency range 1-150 Hz

Amplitude 5mm (1 tot 10 Hz)

Acceleration 2 gn (10 to 150 Hz)

Sweep rate 1 octave per minute

Sweep cycles 10, Directions 3

Vibration tested by Sebert Trillingstechniek BV.

Standard: IEC60068-3-3 for Nuclear Generating Stations.

Certificates on request available.



General specifications are:

Modes of protection: Ex e mb, Ex tD A21

ATEX classification: Group II Category 2 G D

Zones: Zone 1, 2, 2, 22

Applied standards EN/IEC: 60079-0, 60079-7, 60079-18
 EN: 60079-31, 62262, 60598-2, 60598-2-1
 600598-2-22, EN 55015, EN 61000-3-2, EN61000-3-3

Approvals:

IECEx: Dek 11.0075,
 ATEX: DEKRA 11ATEX0133

Ex code: Gas Ex II 2 G Ex e mb II T5/T6

Stof Ex II 2 D Ex tD a21 IP68 T80° /100° C

Inspection: Visual inspection in accordance with
 EN/IEC 60079-17

Product specifications are:

Housing: Seawater resistant anodized (25 micron) NORSOK 121 aluminium
 with tempered glass.

Lamps: Pre-mounted long life lamps, colour 4000K

IP Rating; **IP68**, by DEKRA 211978700

Temperature range: From -20°C to 55°C for standard version and -20° C to +30° C for emergency version.

Voltage: 220-264VAC, 50/60Hz

Electrical connection: 0,5-6mm² spring terminals through integrated external
 junction box (sealed by resin after installation and test).

Entries: 2 x M25 cable gland entries. One plugged.

Glands must be ordered separately

Ballast: Electronic with and of life protection.

Mounting: 2 x adjustable brackets on guidance rail for easy and
 quick installation.

LED (Em. Version) 90 minutes battery backup on emergency version.

Disconnecting possibility during installation by "B" terminal.

Battery lifetime: 300 cycles, automatic random test each 100 days.

Options: Upon request quantities may high due to minimum production

Voltage: 110/120VAC, 50/60Hz (only for 2x18W and 2x36W)

Lamps: Colour 3000K

Electronic connection: 8 meters permanent flying lead, braided.

LED Emergency: 180 minutes backup

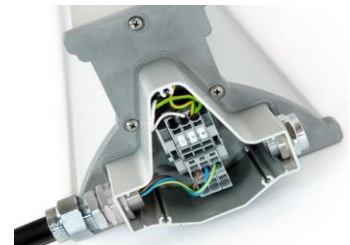
4 LED's to meet requirements of IMO/DNV-OS-A101

Glass: For use in accordance with HACCP environment

(food industry) DEKRA certificate available, Zone 2 & 22.

Wiring: Through wiring (each end of the luminaire aconnection box).

Other area Class.: Zone II, Ex n, 3GD (TNAMLC) or safe area version (TNAMLD)



Accessoires:

- Anti-corrosion set: Special set to prevent bi-metallic corrosion on the mounting bracket in salt water conditions. **(Must be ordered for use on board of vessels).**
- Mounting brackets: Pole and ceiling mounting brackets
- Safety wire: For installation into a fixing arrangement on the fitting.
- Cable gland: Suitable rated cable glands can be supplied with the light fitting. (one or two per fixture)
- Manned/unmanned facilities: Black Start function for manned/unmanned functionality.
- Indoor ceiling install. Frame for recessed installation.



Atex Zone 1-21

Number	Description	Light output in Lumen:	
02TE222450	TNAML EX 2x18W	2x18W	2600 lumen
02TE222451	TNAML EX 2x36W	2x36W	6000 lumen
02TE222452	TNAML EX 2x58W	2x58W	10400 lumen
02TE222453	TNAML EX EM 2x18W Emergency backup	2x18W	2600 lumen
02TE222454	TNAML EX EM 2x36W Emergency backup	2x36W	6000 lumen
02TE222455	TNAML EX EM 2x58W Emergency backup	2x58W	10400 lumen

Atex Zone 2-22

Number	Description	Light output in Lumen:	
02TE223450	TNAML EX 2x18W	2x18W	2600 lumen
02TE223451	TNAML EX 2x36W	2x36W	6000 lumen
02TE223452	TNAML EX 2x58W	2x58W	10400 lumen
02TE223453	TNAML EX EM 2x18W Emergency backup	2x18W	2600 lumen
02TE223454	TNAML EX EM 2x36W Emergency backup	2x36W	6000 lumen
02TE223455	TNAML EX EM 2x58W Emergency backup	2x58W	10400 lumen

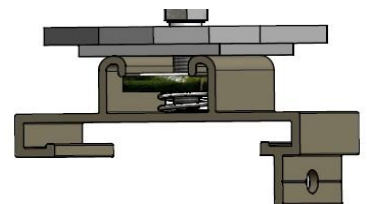
NON Atex Industrial

Number	Description	Light output in Lumen:	
02TE221450	TNAML EX 2x18W	2x18W	2600 lumen
02TE221451	TNAML EX 2x36W	2x36W	6000 lumen
02TE221452	TNAML EX 2x58W	2x58W	10400 lumen
02TE221453	TNAML EX EM 2x18W Emergency backup	2x18W	2600 lumen
02TE221454	TNAML EX EM 2x36W Emergency backup	2x36W	6000 lumen
02TE221455	TNAML EX EM 2x58W Emergency backup	2x58W	10400 lumen

Special installation instructions are enclosed in each box with the fixture. A cartridge with a special sealing product for the junction box is also included.

02TE6030 Anti-corrosion connection set for marine applications

7748075EX Cable gland M25 Exd with rubber seals.



Glamox Fluo fixture type MIX-Z 67 ATEX ZONE 2, II 3GD Eex nA T3

Watertight fixture for marine and offshore.

Certified by accredited certifications according to Ex n norms IEC-79-15

MIX67: 3GD Eex nA T3, IP 66/67 Ta=30°C/45°C.

Mechanical impact (EN 50 102): IK 10

Available in 230V 50 or 60 Hz, and 110V 60Hz

Body of deep Aluzink, Stove enamelled white epoxy/polyster powder finish.

Diffuser made of impact resisting polycarbonate (PK) or optionally chemical resistant (Kembest) material.

A white plate of Aluzink covers the electrical gear.

Two T8 lamps with spring loaded lamp holders.

HF electronic ballast for emergency versions (HF-E3)

Both sides one M20 gland and blind plug. Trough wiring (TW) 5x2.5 mm² is standard.

Emergency lights possible (E1) one hour (E3) three hour. In 58W only one hour possible.



Number	Description	Watt	Volt/Hz	L in mm	C in mm
89GL1141	MIX-Z 67 218F TW PK	2x18W	230/50	724	704
89GL1142	MIX-Z 67 236F TW PK	2x36W	230/50	1334	1314
89GL1143	MIX-Z 67 258F TW PK	2x58W	230/50	1634	1614
89GL1144	MIX-Z 67 218F E3 TW P	2x18W	230/50	858	838
89GL1145	MIX-Z 67 236F E3 TW P	2x36W	230/50	1468	1448
89GL1146	MIX-Z 67 258F E1 TW P	2x58W	230/50	1768	1748
89GL1147	MIX-Z 67 218F 3/6 TW	2x18W	230/60	724	704
89GL1148	MIX-Z 67 236F 3/6 TW	2x36W	230/60	1334	1314



Glamox Fluo fixture type MAX-Z 67 Hazardous area, zone 1 Ex edms IIC T4, IP66/67

Watertight fixture for marine and offshore.

NEMKO certificate no EX 97D184

MAX: IP66/67 Ta=45°C, Zone 1 Ex edms IIC T4

Mechanical impact (EN 50 102): IK 10

Available in 230V 50 or 60 Hz, and 110V 60Hz

Body of deep drawn Aluzink, Stove enamelled white epoxy/polyster powder finish.

Diffuser made of impact resisting polycarbonate (PK) or optionally chemical resistant (Kembest) material.

A white plate of Aluzink covers the electrical gear.

Two T8 lamps with Glamox zone 1 lamp holders.

Standard luminaire is delivered with electronic ballast (HF)

Both sides one M20 gland and blind plug. Trough wiring (TW) 6x2.5 mm² is standard.

Emergency lights possible (E1) one hour (E3) three hour. In 58W only one hour possible.



Number	Description	Watt	Volt/Hz	L in mm	C in mm
89GL1151	MAX-Z 67 218HF TW PK	2x18W	230/50	724	704
89GL1152	MAX-Z 67 236HF TW PK	2x36W	230/50	1334	1314
89GL1153	MAX-Z 67 258HF TW PK	2x58W	230/50	1634	1614
89GL1154	MAX-Z 67 218HF E3 TW	2x18W	230/50	858	838
89GL1155	MAX-Z 67 236HF E3 TW	2x36W	230/50	1468	1448
89GL1156	MAX-Z 67 258HF E1 TW	2x58W	230/50	1768	1748



The RMS range of Zone 1 fluorescent luminaires is manufactured from AISI304 stainless steel.

The body is fabricated from AISI304 stainless steel. The body is fabricated from a single sheet with no invasive mounting holes to minimize the risk of water ingress through the housing. The tempered glass window minimizes the risk of light output loss over time due to polycarbonate yellowing. The RMS range is ideally suited for on and offshore and marine environments and all kinds of industry where there is a high level of corrosion.

Specifications are:

- Material: Stainless Steel AISI 304/AISI 316, 0.8 mm thickness and transparent part in tempered glass.
- IP Rating: IP66
- Temperature: From -20°C to 60°C
- Approvals:** INERIS 01ATEX0060
Brazilian 08/UL-BRCP-0001
GOST Certificaat
- Standards: EN/IEC: 60079-0, 60079-1, 60079-7
EN: 61241-0, 61241-1
- Ex-code:** Ex II 2 GD
Ex de IIC T6 (-20°C to 40°C)
Ex de IIC T5 (-20°C to 55°C)
Ex de IIC T4 (-20°C to 60°C)
Ex tD A21 IP66/67 T85° C / T 100°C / T 135°C
According to European Directive 94/9/EC (ATEX)
For Zone 1 / zone 2, zone 21 / zone 22
- Gaskets: Special cross section tightness gasket, silicon rubber made (close cells) located in housing channel between body and window frame.
- Entries: Body complete of two diam. 21mm through holes for cable entries, one complete of metallic plug with lock nut and gasket, and the other one with plastic plug for dust protection.
- Hardware & screws: AISI304 Stainless Steel external hardware and screws
- Lamp: Lampholder suitable for fluorescent two pins lamp type PHILIPS TL-D or equivalent.
- Lamps wattage: 18 / 36 Watt
- Ballast: High frequency electronic ballast
- Rated operation Voltage (UE) 220/240 V
- Frequency: 50-60Hz
- Power factor: > 0.95
- Accessories: Suspension mounting kit G1 AISI304
- On request: Wall mounting kit H1 AISI304
Pole mounting kit P12 AISI304
(not suitable for 18W emergency version)
- Emergency service: Available for emergency service see RMS 560 PNL/LE-P



Number	Description
020100	RMS560 1x18W, stainless steel, 230V
020101	RMS560 2x18W, stainless steel, 230V
020102	RMS560 1x36W, stainless steel, 230V
020103	RMS560 2x36W, stainless steel, 230V

With Micro Switch : When opening the frame-window the micro-switch will cut out the power supply.

020104	RMS560 MS 1x18W, stainless steel, 230V
020105	RMS560 MS 2x18W, stainless steel, 230V
020106	RMS560 MS 1x36W, stainless steel, 230V
020107	RMS560 MS 2x36W, stainless steel, 230V



With emergency service on one lamp for 60 with constant lighting output
With emergency service on one lamp for 90 with lighting output decreasing

020110	RMS560 EM 1x18W, stainless steel, 230V
020111	RMS560 EM 2x18W, stainless steel, 230V
020112	RMS560 EM 1x36W, stainless steel, 230V
020113	RMS560 EM 2x36W, stainless steel, 230V
020119	Wall mounting kit H1 AISI304
020120	Pole mounting kit P2 AISI304