LEADING & RANGE LIGHTS

MRL-D

LED RANGE LIGHT

GPS | UHF | GSM | SAT

OPTIONAL

MRL-D

Long-range LED range light

The MRL are long-range LED Range Lights, especially designed to mark port approaching and entrance channels, rivers and straight lanes in bays. They are commonly used in traditional leading stations of two lights, in both day and night modes.

Conspicuous light in locations with strong background lighting

The navigator can move forward by the centre of a narrow channel when the two lights are aligned, separating them when the vessel strays from one side; this provides information on his position outside the leading line. When these lights are synchronized, they are much more conspicuous to distinguish them in locations with strong background lighting.

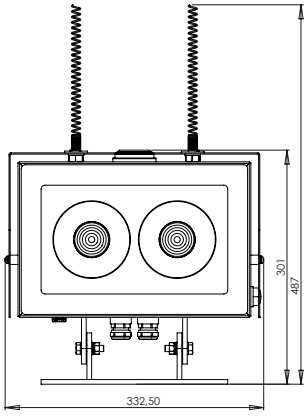
Maintenance-free

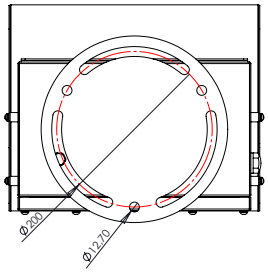
The MRL-D light produces an unidirectional beam with a horizontal divergence 2.0°. Its luminous source, consisting of high-power LEDs of 100,000 hours average life, makes it a maintenance-free beacon.
Designed according to IALA Recommendations.

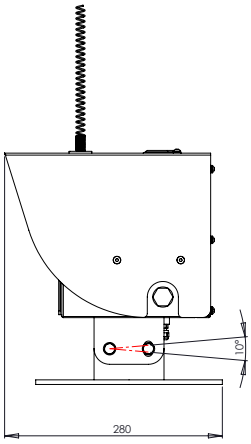
FEATURES

- *State-of-the-art LED technology.*
- *Day range up to 5 nm.*
- *Nominal night range up to 24 nm (T=0.74).*
- *Maximum total LED power: 10 W.*
- *Horizontal divergence 2° (50% I_o).*
- *High-accuracy optical system, stabilised against vibrations.*
- *Enclosure made from marine aluminium with outer polyurethane finishing.*
- *Circular, high-resistance glass lens cover.*
- *Average operation lifetime over 25 years.*
- *100% humidity resistant.*
- *Double RS-232 serial port for setting adjustments by PC and remote monitoring system.*
- *Maintenance free.*

MRL-D







Optical system

Light source:	High-intensity LED diodes.
Lens:	Collimator, a lens for each LED.
Day range:	Up to 5 nm.
Nominal night range:	Up to 24 nm (T=0.74).
Horizontal divergence:	2º (50% I_o).
Vertical divergence:	2º (50% I_o).
Power supply:	Up to 10 W.
LED average life:	More than 100,000 hours.

External electronic control unit

Flash rhythms:	256 (6 nos. user selectable).
Circuit:	Microprocessor controlled.
Settings:	By microswitches or PC.
Input voltage:	From 9 to 36 V c.c.
Day/night threshold:	Adjustable between 10 and 400 lux.
Power supply:	Individual for each LED.

Automatic & programmable luminous intensity reduction at night.

Reverse-polarity, short-circuit, over-temperature and transient overvoltage protections.

Materials and environment

Enclosure:	Stainless steel, with polyurethane finish.
Lens cover:	High-resistance glass.
Watertightness degree:	IP 67.
Humidity resistance:	100%. Pressure-compensation valve to avoid condensation.
Temperature range:	From -30º to 70ºC.
Fixings:	2 - 3 nos. bolts in a 200 mm diameter.

All internal components are assembled on a base plate.

Easy adjustment and levelling.

Options

Synchronization by cable or GPS receiver.

Remote monitoring module via GSM, radio or satellite.

RS-485 MODBUS serial port.

Other divergences available under request.

Other supports available under request.

Other dimensions available under request.

Peak intensities (Cd)

Model			
MRL-D	517,048	336,128	230,104

Specifications subject to change without previous notice.

The MRL range light can be installed both individually and in a matrix of several units fixed on a support frame.

MSM

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