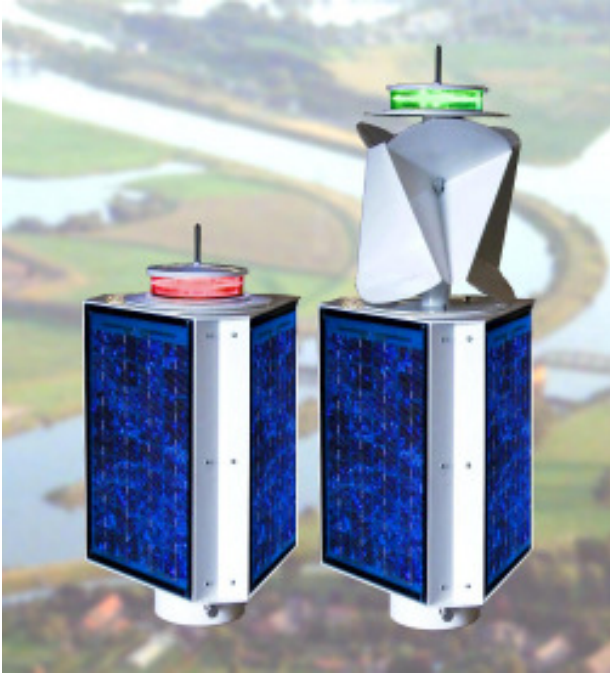


LEDFORCE self-contained



The *LEDFORCE* self-contained is a durable marine lantern, specifically designed to operate autonomously. The lantern is easy to install and used for navigation beacons, marking buoys, harbour lights and other marine applications requiring marking lights with visibility of 3 Nm.

The *LEDFORCE* self-contained in standard setting is equipped with an integrated electronic flasher, solar panels, battery, controller and a twilight switch. Optionally a radar reflector, mounting flange and pipe supports can be ordered.

The lantern is available with red, green, yellow or white LED's. The application of LED's instead of electric bulbs has a major advantage: the LED-life is approximately 100.000 burning hours. This enables construction of lanterns with a (maintenance-free) life of 15 years or more.

PINTSCH ABEN uses the newest generation high intensity LED's. This results in a relatively small number of LED's. Furthermore lenses can be omitted and a compact design is possible. Finally the end-user benefits most: *PINTSCH ABEN* offers you the *LEDFORCE* self-contained marine lantern against an excellent price/quality ratio.

FEATURES:

- ☛ Fully autonomously functioning marine lantern with integrated solar energy unit
- ☛ Compact, durable design with lexan tube section, highly resistant against vandalism
- ☛ Easy "plug and play" installation with M12 bolts on pipe sleeve Ø133mm
- ☛ Minimum 5 years free from maintenance
- ☛ Visibility exceeds 3 nautical miles
- ☛ Integrated electronic flasher (256 programmable characters) and twilight switch
- ☛ Available with red, green, yellow or white LED's
- ☛ **OPTIONS:** Radar reflector, pipe support, Flange connection



LEDFORCE self-contained on pier (NL)

APPLICATIONS:

- Waterway beacons and marking buoys
- Landing beacons and obstacle marking lights
- Harbour, pier and bridge lights

(led self-contained eng, 4-03-2008.hh)

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TECHNICAL DATA:

DIMENSIONS / WEIGHT

Length	360 mm.
Width	315 mm.
Focal height	440 mm.
	750 mm. (including radar reflector)
Nett weight	29 kg
	35 kg (including radar reflector)

LUMINOUS SPECIFICATION

Luminous range	> 3 nautical miles for all IALA colors at T=0,74
Light divergence	15° vertical at 100% peak intensity 360° horizontal
Service life	up to 10 years, depending on application and local condition
Flasher	256 adjustable IALA characters
Switch-on/off	via integrated twilight switch
Colors	white, red, green and yellow

ENERGY UNIT:

Solar panels	3 x 10 Watt
Battery capacity	48 Ah.
Voltage	12 Volt DC.

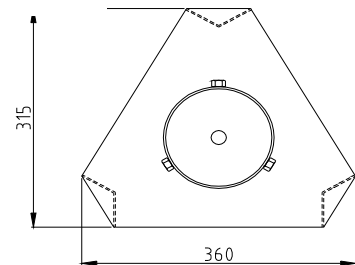
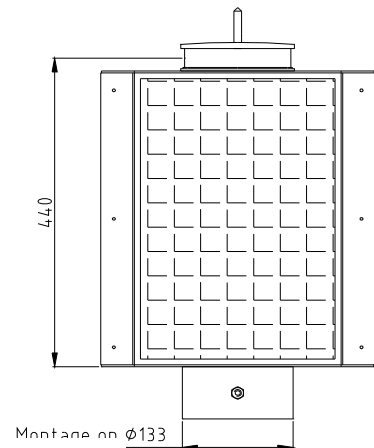
WORKING CONDITIONS

Working atmosphere	designed for continuous operation in salty air
Operating temperature	-20°C.+55°C
Moisture resistancy	100% relative air humidity

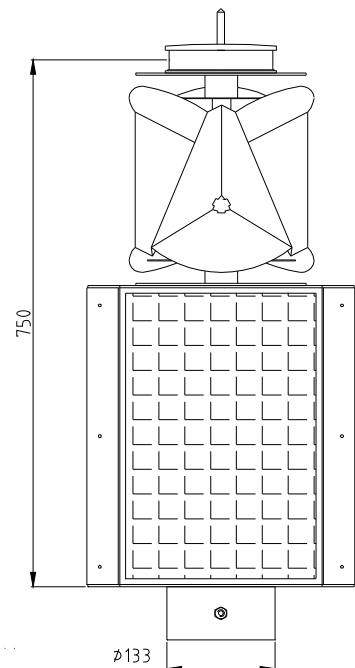
MOUNTING	on pipe support Ø133mm. using 3 fixation bolts M10
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OPTIONS

Radar reflector	Stainless steel, durable white coated
Pipe support	max. height 4 meter, material carbon steel, durable coated
Flange connection	mounting flange, 4 holes Ø12 mm. on Ø200 mm. bolt circle



Type LA-3



Type LA-3R