Dural FD®

## INSTRUCTION SHEET for: **2JA 959 700-xx** / **2JA 980 704-xxx**

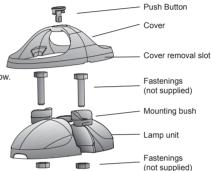


## DuraLED® 12 White LED Universal High Efficacy Lamp Dualvolt 12 / 24V DC with or without switch

HELLA LED lamps offer many advantages over conventional bulb lamps including significantly reduced power consumption and a high tolerance to shock and vibration for an ultra long service life.

## Installation

- Carefully insert a small flat blade screwdriver between the cover and the lens and pull towards the lens, the cover will clip off.
- Drill two holes up to 6mm Ø at 47mm centres.
- 5mm  $\varnothing$  screws or bolts are recommended to mount the lamp using the mounting bushes provided.
- Lamp should be mounted on a flat surface.
- If passing the cable through a hole, ensure there are no sharp edges to cut or chafe the cable.
- Drill a cable exit hole 6mm Ø in the position as shown on diagram below.
- Connect cable as per instructions below.
- Clip the cover on securely until flush with the lamp surface.
- When mounting lamp units side by side allow a gap of 5mm to ensure cover can be removed.
- For the switch version of this lamp: firmly push the heavy duty switch in the centre of the lamp to turn lamp on or off.



Wiring & Protection: This lamp is Dualvolt capable, allowing full light output on both 12 and 24 volt electrical systems. LED modules are polarity conscious. Reverse polarity will not damage this product but will inhibit its function. Hella marine recommends wire connections be soldered and heat shrink tubing applied to seal the joint. Lamp must be protected by a fuse rated at 5 amperes maximum. Do not attempt to open – no serviceable parts inside.

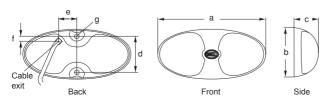
Colour	Connect to	Power
Red	Signal (+)	<3W
Black	Negative (-)	-

Approvals: CE, & (RCM), ISO 8846 (ignition protection).

**Electromagnetic Compatibility (EMC):** This LED lamp is an electronic device. The electrical circuits contain components that suppress possible interference, both emission as well as susceptibility, to the limits prescribed in international regulations. To avoid false signals or interference, it is standard practice that sensitive instrumentation such as ABS and Tachometers etc. are provided with direct earths.

**Protection against damage due to voltage spikes:** This Dualvolt LED lamp is protected against damage from positive voltage spikes caused by events such as load dump conditions up to severity level 3 of ISO 7637-2 and against reverse polarity connection and negative voltage spikes of up to 1000 volts.

**Electric Welding** may damage the LED lamps. For LED lamps installed on vehicles, HELLA recommends the negative connection to be wired isolated from the vehicle chassis. If the lamp uses the chassis as the earth return it is recommended that this earth return is disconnected during electric welding.



## Dimensions:

a = 140mm / 5.51" b = 65mm / 2.56" c = 32mm / 1.26" d = 47mm / 1.61" e = 21mm / 0.35" f = 9mm / 0.35" g = 5mm / 0.20"