

## NiCd Batteries

### PRODUCT DESCRIPTION

Luxbox high-temperature Nickel Cadmium batteries have been specifically selected and tested for use with self-contained emergency lighting.

Tried and tested NiCd batteries are the default choice for emergency lighting applications



### KEY FEATURE AND BENEFIT

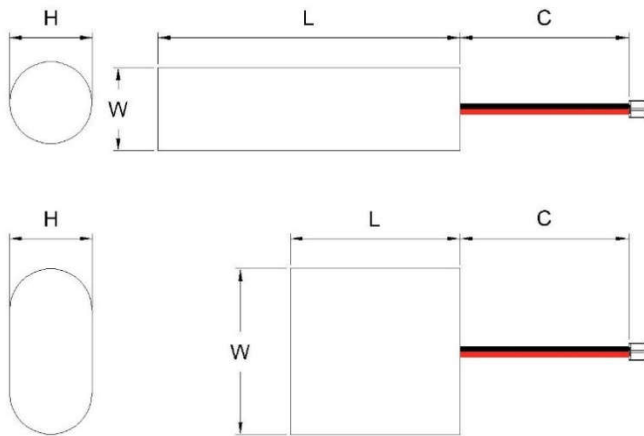
- 1 year warranty

NiCd Battery Products		
Product Group	Product Code	Description
<b>Pack</b>	14-11-0007	Battery NiCd D-HT 2.4V 4.0Ah 2-Cell Pack – 250mm JST-EH
	14-11-0009	Battery NiCd D-HT 3.6V 4.0Ah 3-Cell Pack – 250mm JST-EH
	14-11-0014	Battery NiCd D-HT 4.8V 4.0Ah 4-Cell Pack – 250mm JST-EH
<b>Stick</b>	14-11-0006	Battery NiCd C 2.4V 2.5Ah 2-Cell Stick
	14-11-0008	Battery NiCd D-HT 2.4V 4.0Ah 2-Cell Stick – 250mm JST-EH
	14-11-0010	Battery NiCd D-HT 3.6V 4.0Ah 3-Cell Stick – 250mm JST-EH
	14-11-0011	Battery NiCd D-HT 4.8V 4.0Ah 4-Cell Stick – 250mm JST-EH
<b>Accessories</b>	14-95-0002	Battery End Cap – D-Cell
	14-98-0004	NiCd Battery connection lead (tag to JST)

\*other options available on request

NiCd Technical Specification	
Cell Type	Sealed, wound electrode – Cs, C and D cells
Rated capacity at C/5	Cs = 1.8Ah, C = 2.5Ah, D = 4.0Ah
Design life under following conditions;	>4 years
• Max. continuous temperature	+55°C
• Max. temperature (occasional excursions)	+70°C
• Continuous charging current	0.05 C to 0.07 C
• Max. discharge frequency	1 discharge per month
• Max. discharge rate for 1 hour	0.6C
• Max. discharge rate for 3 hours	0.25C
Approvals and Certificates	IEC 61-951-1 (5.1.2) / IEC 61-951-1 (3.3.7) / IEC 61-951-1 (7.2) / IEC 6951-1 (7.4.2.3) and (7.9) / IEC 61951-1(2003)7.4.2.3 / IEC 60 598.2.22-2002

## NiCd Dimensions



Stick dimensions mm									
Cell Type	C	D	C	D	C	D	C	D	
No	Height		Width		Length		Cable		
2	26	33	26	33	97.5	120			250
3		33		33		180			250
4		33		33		240			250
Pack dimensions mm									
No	Height		Width		Length		Cable		
Cell Type		D		D		D		D	
2		66		33		59			250
4		132		33		59			250

\*other options available on request

## NiCd Battery Management

Overcharge	Designed to be continuously overcharged, the battery accepts overcharge up to 0.1C at 30°C without damage.
Deep discharge	A deep discharge or 'over discharge' may damage the cell performance so it is recommended to disconnect the lighting load at the end of discharge and reconnect to the equipment charger to fully recharge the battery. In addition, at the start of the first charge following full discharge, the charging voltage may exceed the maximum allowed value.
Normal storage	Store the battery within a temperature range of +5°C to +25°C in a 65±5% relative humidity atmosphere.
Long term storage (up to 6 months)	After long term storage in open circuit, up to 5 IEC cycle may be required to recover the initial performance of the battery.
Service life	Exceeding stated limited for charging, discharge, storage or temperature range can reduce the service life and damage the cell performances.

## NiCd Battery Cautionary Notes

- Batteries should be charged prior to use.
- Before using a new battery for the first time or after long term storage, fully charge the battery before (see above note).
- Use the correct charger for Nickel cadmium (NiCd) batteries.
- Do not short circuit batteries, permanent damage to batteries may result.
- Do not damage or incinerate batteries, they may burst or release toxic material.
- Do not solder directly to cells or batteries.
- Do not subject batteries to extremes of temperature, excessive over charging or over discharging.
- Store batteries in cool dry place.
- Avoid batteries being used in an airtight compartment. Ventilation should be provided from the battery compartment; (batteries may generate hydrogen gas, which could cause an explosion if exposed to an ignition source).
- When connecting a battery pack to a charger or device, ensure correct polarity.
- If any noise, excessive temperature or leakage from a battery is observed, DO NOT USE.
- When the battery is hot, please do not touch it and handle it, unit it has cooled down.
- Do not remove the outer sleeve from a battery pack or cut into its housing.
- Unplug a battery by holding the connector itself and not by pulling at its cord.
- After use, if the battery is hot, before recharging it, allow it to cool in a well-ventilated place out of direct sunlight.
- Never put a battery into water or seawater.
- Do not attempt to take batteries apart or subject them to pressure or impact. Heat may be generated and may result in a fire.
- Keep batteries away from children. If cells or batteries are swallowed, contact a physician at once.