BELNICD SC1500
1.2V 1500 mAh

Beltrona
PERFORMANCE FOR YOU

1、 APPLICATION

This specification governs the performance of the following Nickel-Cadmium Cylindrical cell and its stack-up battery

Model： ID-SC 1500T

Cell Size： $\varphi 22_{\pm 0.5} \times 42.5_{\pm 0.5}$

2、 DATA OF STACK UP BATTERIES

All data involves voltage and weight to stack-up battery are equal to the value of unit cell times the number of unit cell which consisted in the stack-up batteries

Example:

Stack-up battery consisting three unit cells

Nominal voltage of unit cell=1.2V

Nominal voltage of stack-up batteries=1.2V×3=3.6V

3、 RATINGS

Description	Unit	Specification	Conditions
Nominal Voltage/	V	1.2	
Nominal Capacity	mAh	1500	Standard Charge/Discharge
Standard Charge	mA	150(0.1C)	Ambient Temperature： 25℃
	Hour	16	
Quick Charge	mA	450 (0.3C)	Ambient Temperature： 25℃
	hour	4	
Trickle Charge		(0.03C)~(0.05C) 45mA~75mA	-5~55℃
Standard discharge	mA	300(0.2C)	Ambient Temperature： -20~60℃ Humidity：Max ： 85%
DischargeCut-off Voltage	V/cell	1.0	
Storage Temperature	℃	-20~40	Discharged state、Humidity、Max.85%

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4、 PERFORMANCE

Unless otherwise stated, tests should be done within one month of delivery under the following conditions:

Ambient Temperature T：20±5℃
Relative Humidity：65±20%

Test	Unit	Specification	Other Condition	Remarks
Capacity	mAh	≥1500	Standard Charge Discharge	up to 3 cycles are allowed
Open Circuit Voltage(OCV)	V/cell	≥1.25	Within l hour after standard Charge	
Internal Impedance	mΩ/ cell	≤20	Upon fully charge(l KHz)	
High Rate Discharge(0.5C)	minute	≥110	Standard Charge, l hour rest Before Discharge by 750mA(0.5C) to 1.0 V / cell	up to 3 cycles are allowed/
Overcharge	mA	150(0.1C)	Continuous charge 28days at 0.1C and stored for 30minutes, discharge to 1.0V at 0.2C	No leakage nor deformation/discharge time ≥300min
Charge Retention	mAh	≥975(65%)	Standard Charge, Storage：28 days, Standard Discharge/	End voltage is 1.0V/cell
IEC Cycle Life/ IEC	Cycle	≥500	61951-1◎IEC:2003 7.4	(see Note 2)
Safety device operation	N/A	No disrupt nor burst	Forced discharge is conducted for 60minutes at 1C after pre-discharge at 0.2C to 0V	Leakage of electrolyte and deformation are acceptable
Impact Resistance		There should be no breakage for PVC sleeves, and the capacity should be more than nominal capacity.	Charge the cell 0.1C 16hrs,Then leave for 1-4hrs, check bat-before/after dropped, Height 100cm Wooden board (thickness 3mm),Direction is not specified, repeat 3 times.	

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5、 Special clause for Emergency Lighting luminaries

Item	Technical Data	International standards Clauses
cells intended for permanent charge at elevated temperature	Yes	EN60598-2-22 IEC 61-951-1 (ex IEC60285)§7.2 IEC 61-951-1 (ex IEC60285) §7.4.2.4 and 7.9
Expected operation life under following conditions: ·Maximum continuous temp ·Maximum occasional temp ·Permanent charging current ·Discharge frequency ·Minimum operating time	＞4years +55℃ +70℃(1 month) 75mA max 1 disch/month 1 hour at 0.6C 3 hours at 0.25C	 IEC 60598.2.22 clause 22.6.8 IEC 60598.2.22 Annex A

6、 CONFIGURATION,DIMENSIONS AND PACKINGS

7、 EXTERNAL APPEARANCE

The cell/battery shall be free from cracks, scars, breakage, rust, discoloration, leakage nor deformation.

8、 CAUTION

⑴Reverse charging is not acceptable.

⑵Charge before use. The cells/batteries are delivered in an uncharged state.

⑶Do not charge/discharge with more than our specified current.

⑷Do not short circuit the cell/battery Permanent damage to the cell/battery may result./

⑸Do not incinerate or mutilate the cell/battery.

⑹Do not solder directly to the cell/battery.

⑺the life expectancy may be reduced if the cell/battery is subjected adverse conditions like:

Extreme temperature, deep cycling, excessive overcharge/ over-discharge.

⑻store the cell/battery uncharged in a cool dry place. Always discharge batteries before bulk storage or shipment.

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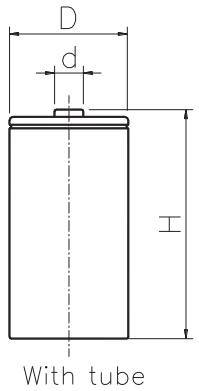
9、NOTES:

（1）Approximate charge time from discharged state is for reference only.

（2）IEC61951-1◎IEC 7.4 Cycle Life:

Cycle No.	Charge	Rest	Discharge
1	0.1C×16h	None	0.25C×2h20min
2-48	0.25C×3h10min	None	0.25C×2h20min
49	0.25C×3h10min	None	0.25C to 1.0V/cell
50	0.1C×16h	1-4h	0.2C to 1.0V/ cell
Cycles l to so shall be repeated until the discharge duration on any 50th Cycle becomes less than 3 h.			



Dimension of the cell	
D	Φ 22±0.5
d	Φ 10.0±0.1
H	42.5±0.5

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