



Ni-Cd Battery Series

Type	Size	Nominal	Nominal	Charge Current In mA			Dimensions (mm)		Weight
		Voltage	Capacity	Standard	Quick	Rapid	Diameter	Diameter	Grams
		(V)	(mAh)	(15 hrs)	(5hrs)	(1.5hrs)	+/-0.5mm	+/-0.5mm	Grams
EC- 150AAA	2/3AAA	1.2	150	15	45	150	10	28	7
EC- 240AAA	AAA	1.2	240	24	72	240	10	44	10
EC- 280AAA	AAA	1.2	280	28	84	280	10	44	10
EC- 150N	N	1.2	150	15	45	150	11.6	28	8
EC- 200N	N	1.2	200	20	60	200	11.6	28	8
EC- 130AA	1/3AA	1.2	130	13	39	130	14	16.5	8
EC- 300AA	2/3AA	1.2	300	30	90	300	14	28	12
EC- 350AA	2/3AA	1.2	350	35	105	350	14	28	12
EC- 400AA	2/3AA	1.2	400	40	120	400	14	28	13
EC- 650AA	4/5AA	1.2	650	65	195	650	14	39.5	19
EC- 700AA	4/5AA	1.2	700	70	210	700	14	39.5	19
EC- 500AA	AA	1.2	500	50	150	500	14	49	21
EC- 600AA	AA	1.2	600	60	180	600	14	49	22
EC- 700AA	AA	1.2	700	70	210	700	14	49	23
EC- 800AA	AA	1.2	800	80	240	800	14	49	24
EC- 900AA	AA	1.2	900	90	270	900	14	49	25
EC- 1100AA	7/5AA	1.2	1100	110	330	1100	14	64.4	34
EC- 1200AA	7/5AA	1.2	1200	120	360	1200	14	64.4	36
EC- 210A	1/3A	1.2	210	21	63	210	16.5	16.8	9
EC- 500A	1/2A	1.2	500	50	150	500	16.5	27.5	16
EC- 600A	1/2A	1.2	600	60	180	600	16.5	27.5	17
EC- 1000A	4/5A	1.2	1000	100	300	1000	16.5	42.1	20
EC- 1100A	4/5A	1.2	1100	110	330	1100	16.5	42.1	24
EC- 1200A	A	1.2	1200	120	360	1200	16.5	48.5	30
EC- 1800A	7/5A	1.2	1800	180	540	1800	16.5	65.9	43
EC- 750SC	1/2SC	1.2	750	75	225	750	22.5	25	30
EC- 1100SC	4/5SC	1.2	1100	110	330	1100	22.5	32.5	36
EC- 1200SC	4/5SC	1.2	1200	120	360	1200	22.5	32.5	38
EC- 1300SC	SC	1.2	1300	130	390	1300	22.5	42.5	44
EC- 1500SC	SC*	1.2	1500	150	450	1500	22.5	42.5	46
EC- 1700SC	SC	1.2	1700	170	510	1700	22.5	42.5	48
EC- 1800SC	SC	1.2	1800	180	540	1800	22.5	42.5	50
EC- 2100SC	5/4SC	1.2	2100	210	630	2100	22.5	49	53
EC- 1200C	C	1.2	1200	120	360	1200	25.5	49	50
EC- 2200C	C*	1.2	2200	220	660	2200	25.5	49	76
EC- 2500C	C	1.2	2500	250	750	2500	25.5	49	82
EC- 2200D	1/2D	1.2	2200	220	660	2200	32.5	35.5	56
EC- 1200D	D	1.2	1200	120	360	1200	32.5	60.5	68
EC- 1800D	D	1.2	1800	180	540	1800	32.5	60.5	75
EC- 4500D	D	1.2	4500	450	1350	4500	32.5	60.5	123
EC- 5000D	D*	1.2	5000	500	1500	5000	32.5	60.5	123
EC- 7000F	F	1.2	7000	700	2100	7000	32.5	89	220

Main Features Ni-Cd Batteries

- 1 **High Capacity:** Our top cells have between 10% to 20% more capacity than other Ni-Cd batteries of the same size.
- 2 **Long cycle life:** At usual operating conditions. 200-1000 cycles can be expected.
- 3 **High discharge rate:** 70% of the capacity available at 1.2V with 1C rate.
- 4 **Low internal resistance:** the cells internal resistance is comparably lower than other manufacturers as a result of using good quality raw materials.
- 5 **Resealable Safety vent:** A resealable safety vent is built in to relieve internal pressure in the event of possible abuse conditions.
- 6 **Outstanding reliability:** Coming from the use of the best available raw materials and high technology.

Typical Performance of Ni-Cd cylindrical cells

1 Charging

Standard charging :

0.1C rate charge 14 to 16 hrs

Fast charging:

0.3C-1C rate, we recommend using a charger with \pm V or temperature sensor control.

See Figure 1 for charging of Ni-Cd cylindrical cells at various charging rates

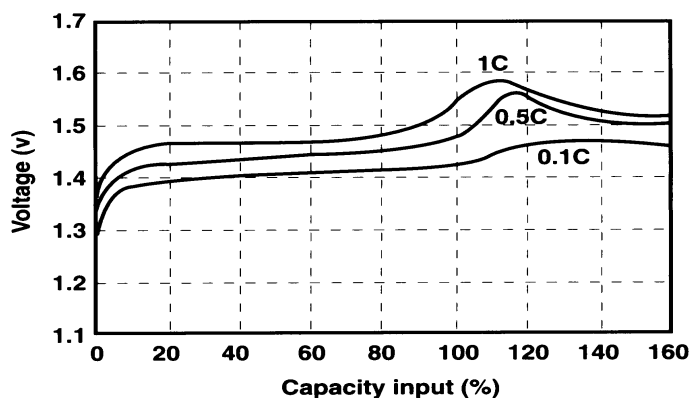


Fig. 1

2 Discharging

Nominal capacity is defined as the available capacity when discharged at 0.2 C for 5hrs at 20 °C to a cut off voltage of 1.0 V

EUROCAP batteries can be discharged from 1C to 3C. The discharge curves for Ni-Cd cells, at various discharge rates and temperatures are shown in Fig. 2.

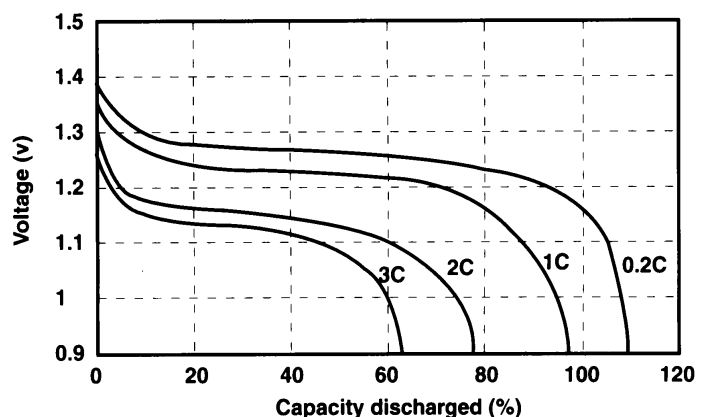
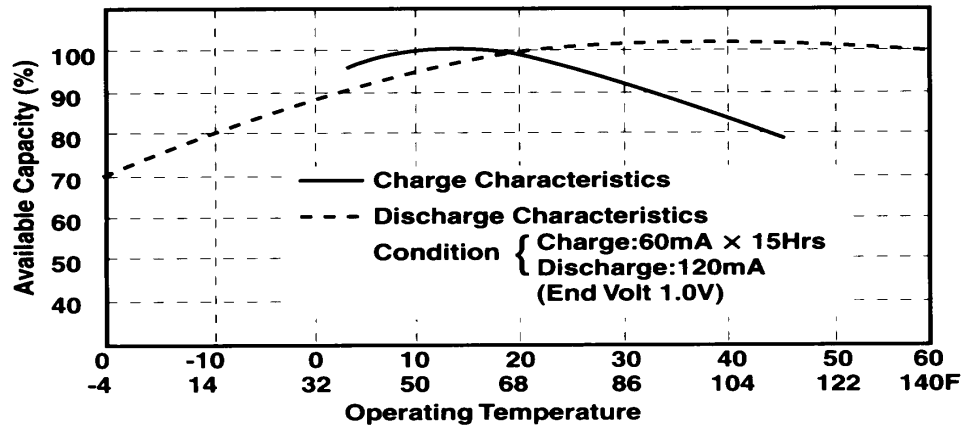


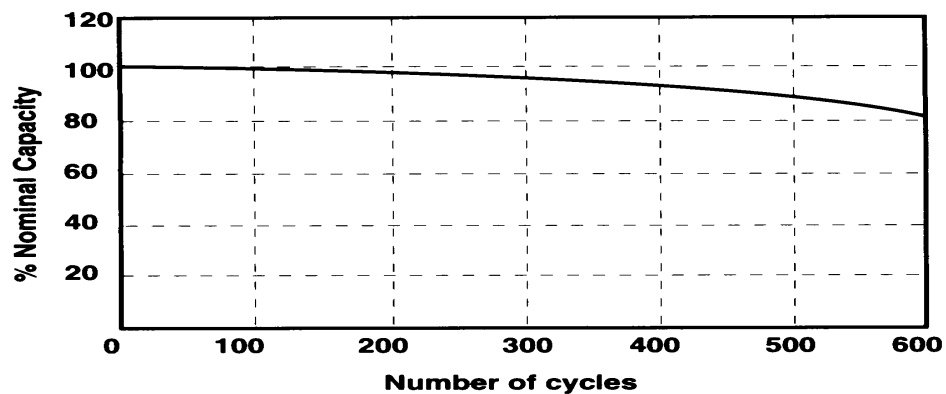
Fig. 2.

3 Charge and Discharge efficiency of Ni-Cd battery at various temperatures:



4 Cycle Life of Ni-Cd Cylindrical Battery

(Charge at 0.5 C, Discharge at 0.2 C / 20 °C)



5 Battery construction

Construction of
EUROCAP
Rechargeable Ni-Cd
Cylindrical Cells

