

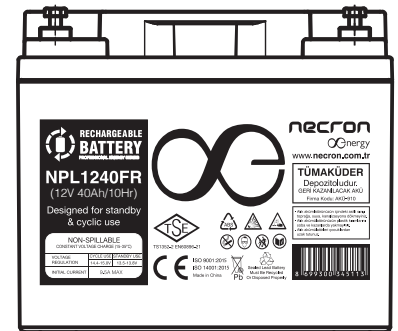
NPL1240FR

Black Line 12V 40Ah

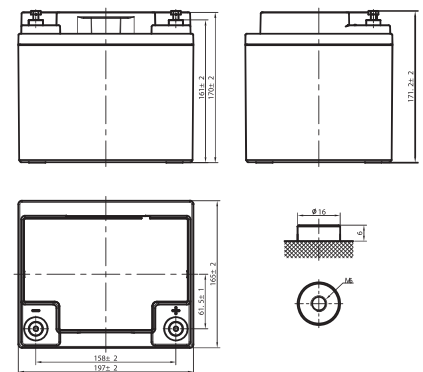


Specifications

Rated Voltage	12V		
Nominal Capacity(C ₁₀ , 1.80V/cell)	40Ah		
Dimension	Length	197±2mm (7.76 inches)	
	Width	165±2mm (6.50 inches)	
	Container Height	170±2mm (6.69 inches)	
	Total Height	170±2mm (6.69 inches)	
Approx. Weight	11.6 Kg (25.57 lbs)		
Terminal	M6		
Container Material	ABS: UL 94 HB or V-0		
Rated Capacity (25°C)	40.0 Ah	(10hr, 4.00A, 1.80V/cell)	
	35.3 Ah	(8hr, 4.41A, 1.80V/cell)	
	33.5 Ah	(5hr, 6.69A, 1.75V/cell)	
	30.3 Ah	(3hr, 10.1A, 1.75V/cell)	
	24.5 Ah	(1hr, 24.5A, 1.67V/cell)	
Max. Discharge Current	500A		
Internal Resistance (25°C)	Approx. 10.0mΩ		
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)	
	Charge	-20~40°C (-4 ~104°F)	
	Storage	-15~50°C (5~122°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Max. Charging Current(25°C)	9.5A		
Charge voltage(25°C)	Charge voltage	Temp. Coefficient	
	Float	2.25 ~2.30V/cell	-3mV/cell/°C
Effect of temp. to Capacity	Equalization	2.30~2.40V/cell	-4mV/cell/°C
	40°C (104°F)		106%
	25°C (77°F)		100%
	0°C (32°F)		86%
Self Discharge	≤ 3%/month @ 25°C		



Layout



Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	71.8	57.3	49.7	39.1	27.6	26.8	21.0	15.6	12.6	9.35	7.40	6.26	4.32	3.89
1.80V/cell	81.6	65.1	56.3	44.2	31.1	28.4	22.4	16.6	13.3	9.79	7.67	6.50	4.41	4.00
1.75V/cell	88.7	70.6	61.0	47.7	33.4	29.6	23.3	17.2	13.8	10.1	7.92	6.69	4.46	4.05
1.70V/cell	94.8	75.2	64.7	50.6	35.4	30.5	23.9	17.7	14.1	10.3	8.12	6.84	4.53	4.11
1.67V/cell	98.1	77.6	66.6	52.0	36.3	31.3	24.5	18.1	14.5	10.6	8.22	6.93	4.58	4.18
1.60V/cell	101.6	80.3	68.7	53.3	37.2	31.9	24.9	18.5	14.8	10.8	8.41	7.07	4.60	4.24

Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	134.1	107.8	94.1	74.3	52.7	51.6	40.7	30.3	24.4	18.3	14.5	12.3	8.58	7.35
1.80V/cell	150.0	120.6	105.2	83.1	58.9	54.3	43.0	32.0	25.7	19.0	15.0	12.8	8.73	7.55
1.75V/cell	160.1	128.7	112.3	88.7	62.9	56.1	44.6	33.1	26.6	19.6	15.4	13.1	8.80	7.57
1.70V/cell	168.3	135.3	118.1	93.3	66.1	57.5	45.5	33.8	27.1	20.0	15.7	13.3	8.92	7.61
1.67V/cell	171.0	137.5	120.0	94.8	67.2	58.7	46.4	34.4	27.7	20.3	15.9	13.5	9.00	7.72
1.60V/cell	173.4	139.4	121.7	96.1	68.1	59.2	46.9	34.8	28.0	20.7	16.2	13.7	9.03	7.75



Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

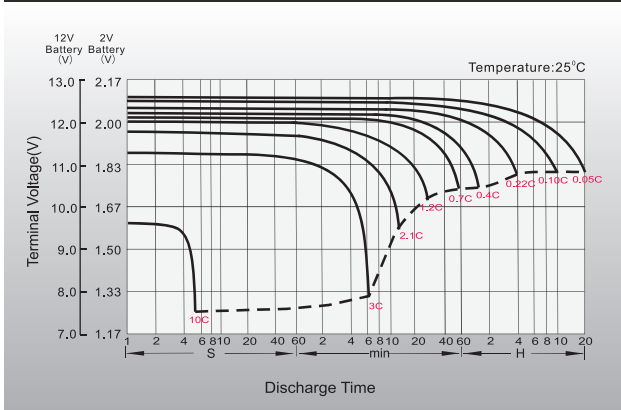
General Features

- 10 years design life (25°C)
- ABS Material : Flame Retardent UL94-V0
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

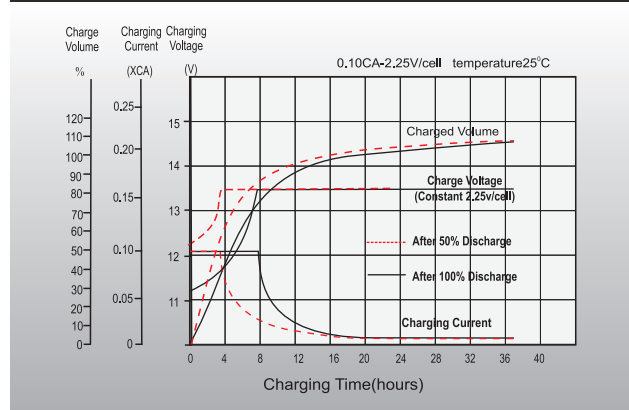
Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in ISO45001, ISO 9001 and ISO 14001 certified production facilities

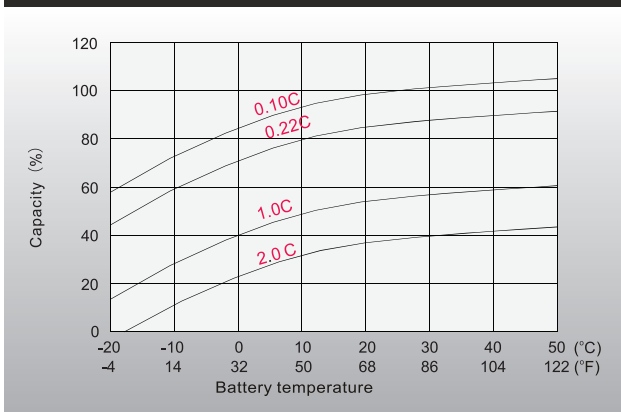
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Float Service Life

