

NPMG240-12 [12V240AH]

Specification

Nominal Voltage	12V
Nominal Capacity(20HR)	240AH
Dimensions	Length 520±2mm (20.55 inches)
	Width 269±2mm (10.59 inches)
	Container Height 203±2mm(7.99 inches)
	Total Height (with Terminal) 209±2mm (8.22 inches)
Approx Weight	Approx 71.0kg (156.52lbs)
Terminal	T5 (M8X16) / Torque: 9.6 ~ 10.7Nm
Container Material	ABS
Rated Capacity	280.0 AH/2.80A (100hr, 1.60V/cell, 25°C/77°F)
	240.0 AH/12.00A (20hr, 1.80V/cell, 25°C/77°F)
	230.0 AH/23.0A (10hr, 1.80V/cell, 25°C/77°F)
	209.0 AH/41.8A (5hr, 1.75V/cell, 25°C/77°F)
	185.1 AH/61.7A (3hr, 1.75V/cell, 25°C/77°F)
Max. Discharge Current	2400A (5s)
Internal Resistance	Approx 2.8mΩ
Operating Temp.Range	Discharge : - 20°C ~ 60°C
	Charge : 0°C~ 50°C
	Storage : - 20°C~ 60°C
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 72.0A Voltage
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
Standby Use	No limit on Initial Charging Current Voltage
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	NPMG batteries may be stored for up to 10 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



Applications

- ◆ Railway and marine systems
- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Electric toys
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments
- ◆ Solar / wind power system



ISO9001 ISO14001

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	336.4	286.1	239.3	190.2	143.9	117.9	75.1	59.4	48.5	39.1	34.0	27.6	22.6	11.8
1.80V/cell	429.8	345.7	282.9	224.4	167.4	132.0	81.9	63.9	51.8	40.0	36.5	29.3	23.0	12.0
1.75V/cell	472.3	377.6	304.3	233.0	173.7	138.1	85.0	65.1	52.9	41.8	37.5	29.8	25.3	13.1
1.70V/cell	/	403.1	319.8	242.5	180.7	142.5	88.4	66.9	54.3	43.0	38.3	30.2	25.5	13.4
1.65V/cell	/	428.6	339.7	255.8	185.2	147.3	90.8	69.7	56.2	44.5	39.1	30.7	26.0	13.5
1.60V/cell	/	458.4	361.9	270.1	193.0	152.5	93.9	71.9	58.0	45.6	40.0	31.0	26.3	13.6

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	621.4	533.8	451.0	362.5	276.7	227.3	145.8	115.7	94.8	76.6	66.9	54.5	46.7	25.5
1.80V/cell	784.6	636.3	525.3	421.2	319.3	253.3	158.0	123.8	100.7	81.9	71.5	57.7	49.4	25.7
1.75V/cell	848.3	686.5	559.7	433.6	328.2	263.8	163.3	125.6	102.6	83.8	73.2	58.5	49.8	25.9
1.70V/cell	/	722.7	583.8	448.8	340.0	271.2	169.4	128.9	105.1	85.7	74.6	59.3	50.3	26.4
1.65V/cell	/	762.6	615.6	469.6	345.4	278.3	173.2	133.7	108.3	87.8	76.0	60.1	51.2	26.7
1.60V/cell	/	802.1	648.6	492.3	358.0	286.7	178.1	137.2	111.3	90.4	77.4	60.5	51.7	26.8

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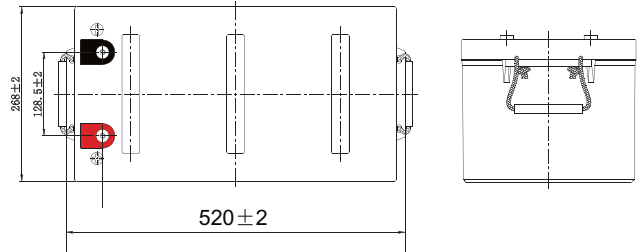
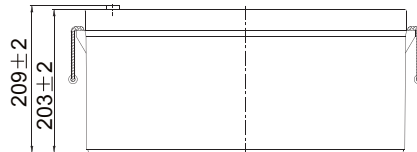
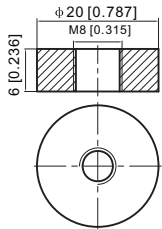
Motive-Power Gel Battery

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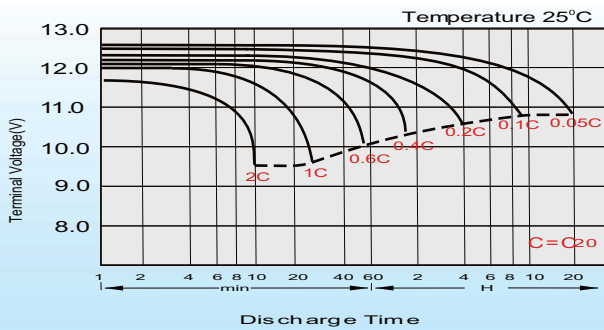
Dimensions

T5 Terminal

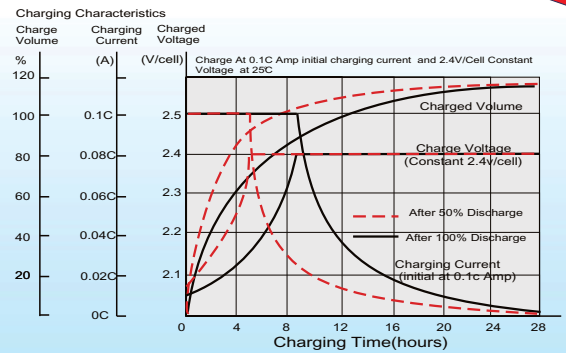
Unit: mm [inches]



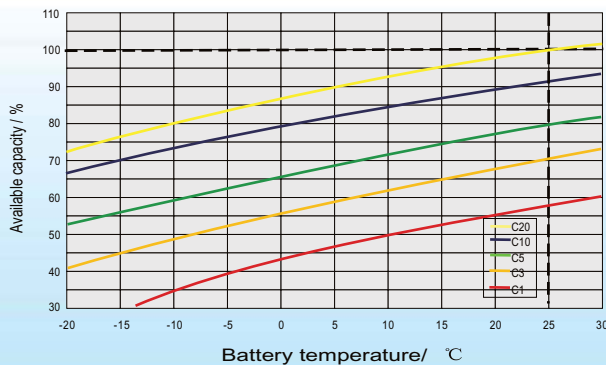
Discharge Characteristics



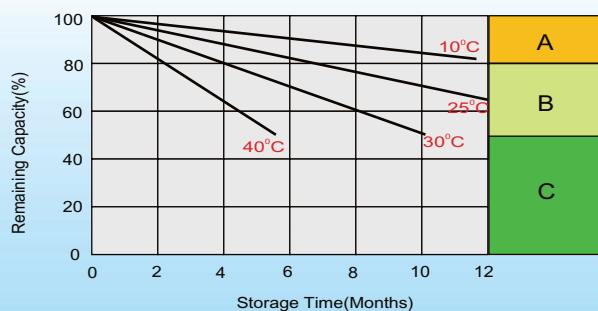
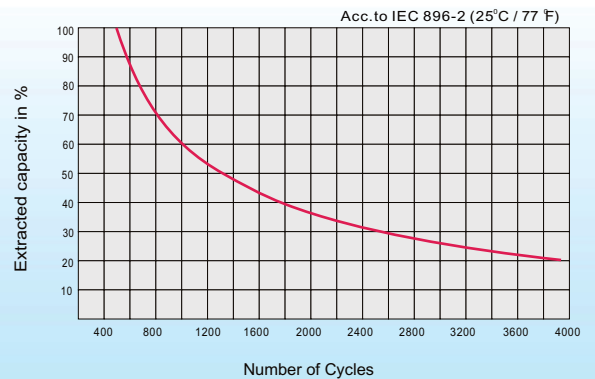
Charging Characteristics (cycle use)



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

Specifications subject to change without prior notice.