



HA12-28P



Valve-regulated lead-acid battery

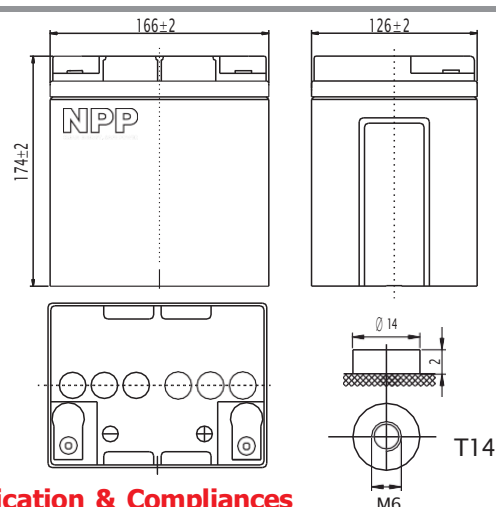
Characteristics

Nominal voltage		12V (6 cell per unit)
Nominal power at 15 min. rate 1.67V/cell (25°C)		110W
Capacity (25°C)	20 Hours rate/10.5V	28Ah
	5 Hours rate/10.5V	24.8Ah
Terminal type		T14
Torque		5.1±0.6N.m
Approx. internal resistance (25°C)		9.0 mΩ
Dimensions	Length	166±2mm (6.54inch)
	Width	126±2mm (4.96inch)
	Height	174±2mm (6.85inch)
	Total height	174±2mm (6.85inch)
Design Life (stand-by)	JIS at 25°C	5 years
	Eurobat at 20°C	3-5 years
Weight		8.80kg (19.40lbs)±3%
Nominal operating temperature		25±3°C (77°F±5)
Operating temperature range	Discharge	-15°C~50°C (5°F~122°F)
	Charge	-10°C~50°C (14°F~122°F)
	Storage	-20°C~50°C (-4°F~122°F)
Float charging voltage at 25°C		13.6V~13.8V
Cyclic charging voltage at 25°C		14.5V~15.0V
Temperature compensation	Float charge	-18 (mV/°C/Block)
	Cycle charge	-30 (mV/°C/Block)
Max. charging current (A)		8.80A
Max. discharge current for 5 seconds		300A
Self discharge rate (25°C)		≤3%/month
Battery container ABS UL94-HB		V-0 optional

Overview

HEYCAR series batteries are specially designed for applications that require high power output. With their high-power density and low internal resistance, the HR series are the right choice for your most demanding applications.

Dimensions & Terminal Type (mm)



Certification & Compliances



Compliant to: EUROBAT, RoHS, WEEE's and Reach.
Manufactured according to IEC 60896-21 / 22

Construction

Component	Positive Plate	Negative plate	Container	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS (V-0 opt.)	AGM	Sulfuric Acid	Rubber	Copper

Constant current discharge characteristics at 25°C

(Ampere/cell)

F.V/Time	5min	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h
1.60V/cell	128.70	80.04	59.33	47.42	32.45	22.90	18.70	10.30	7.31	5.88	5.06
1.67V/cell	123.29	76.44	57.27	45.45	31.40	22.10	18.20	10.20	7.25	5.83	5.01
1.70V/cell	120.05	74.47	55.72	44.51	30.77	21.70	18.00	10.10	7.22	5.81	4.99
1.75V/cell	114.64	71.20	53.87	43.06	30.03	21.20	17.60	9.98	7.17	5.77	4.96
1.80V/cell	108.15	67.27	50.99	40.77	28.98	20.40	17.10	9.73	6.95	5.59	4.81

Constant power discharge characteristics at 25°C

(Watts/cell)

F.V/Time	5min	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h
1.60V/cell	229.00	146.26	114.00	90.20	61.10	45.30	37.00	20.50	14.70	11.80	10.20
1.67V/cell	218.00	140.08	110.00	86.60	59.20	43.80	36.10	20.30	14.60	11.70	10.10
1.70V/cell	213.00	135.96	107.00	84.80	58.10	43.00	35.50	20.20	14.50	11.70	10.00
1.75V/cell	203.00	130.81	104.00	81.90	56.70	41.90	34.80	19.90	14.40	11.60	9.96
1.80V/cell	192.00	122.57	98.00	77.60	54.60	40.40	33.80	19.40	14.00	11.20	9.66