

KBHR1290 12V 9.0Ah



The Kaise HR batteries were specially designed for applications that demand a very high energy output. With an optimized design of the grids and an excellent formula for pasting the plates, the HR series can deliver up to 40% more than the standard series.

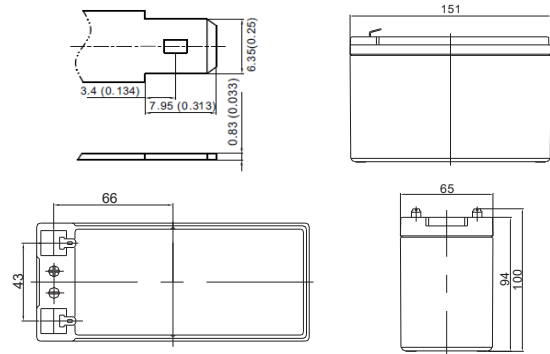
Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	151±1/ 5.94
	Width (mm / inch)	65±1/ 2.56
	Height (mm / inch)	94±1 / 3.70
	Total Height (mm / inch)	100±1 / 3.94
Approx Weight	(Kg / lbs) 2.35 / 5.18	
Design Life	6-8 years	
Terminal	F2	
Container Material	A.B.S. UL94-HB, UL94-V0 Optional	
Rated Capacity	6.11Ah / 6.11A	(1hr, 1.70V / cell, 25°C / 77°F)
	5.4Ah / 10.8A	(30min, 1.70V / cell, 25°C / 77°F)
	4.7Ah / 18.9A	(15min, 1.70V / cell, 25°C / 77°F)
Max. Discharge Current	90A (5s)	
Internal Resistance	≤22.0 mΩ(Full Charge Condition @25°C)	
Operating Temp. Range	Discharge : -20 ~ 60°C (-4 ~ 140°F)	
	Charge : 0 ~ 50°C (32 ~ 122°F)	
	Storage : -20 ~ 60°C (-4 ~ 140°F)	
Nominal Operating Temp. Range	25 ± 5°C	
Max. Charging Current	2.7 A	
Cycle Use	Voltage: 14.6V ~ 14.8V at 25°C (77°F)	
	Temp. Coefficient: -4mV/°C	
Standby Use	Voltage: 13.7V ~ 13.9V at 25°C (77°F)	
	Temp. Coefficient: -3mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Fully charged Kaise High Rate Series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

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

Volts/cell	10min	15min	20min	30min	1h
1.80V	21.95	16.95	13.63	9.889	5.679
1.75V	23.53	17.85	14.30	10.34	5.900
1.70V	25.11	18.90	15.06	10.79	6.105
1.60V	28.26	20.85	16.39	11.68	6.548

Dimensions and Terminal (Unit: mm (inches))



Applications

UPS
High power backup supply
Electric facilities
Power tools

Certifications

ISO 9001 / ISO 14001



Discharge Current vs. Discharge Voltage

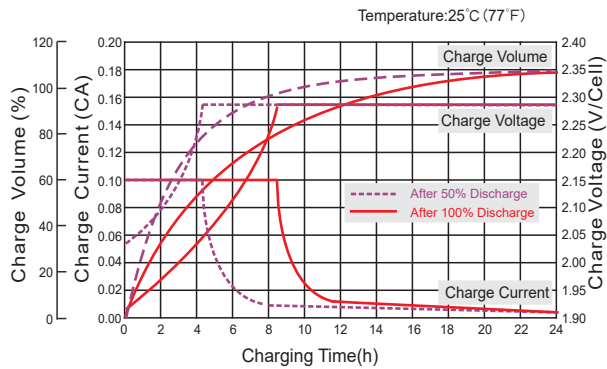
Final discharge voltage V/CELL	1,8	1,75	1,7	1,6
Discharge current (A)	I ≤ 0,1CA	0,25CA ≥ I > 0,1CA	0,55CA ≥ I > 0,25CA	I > 0,55CA

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

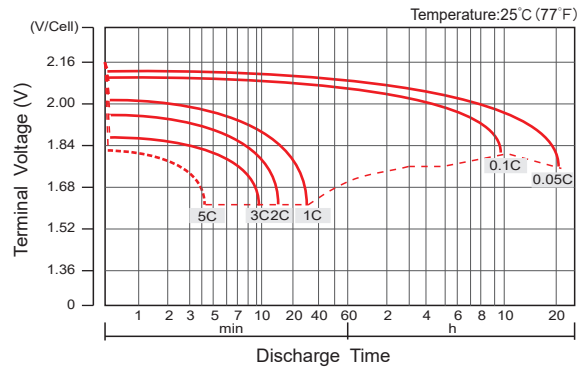
Volts/cell	10min	15min	20min	30min	1h
1.80V	41.53	32.10	26.04	19.00	10.98
1.75V	44.05	33.60	27.11	19.65	11.31
1.70V	46.42	35.25	28.18	20.29	11.63
1.60V	51.16	38.10	30.17	21.58	12.28

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

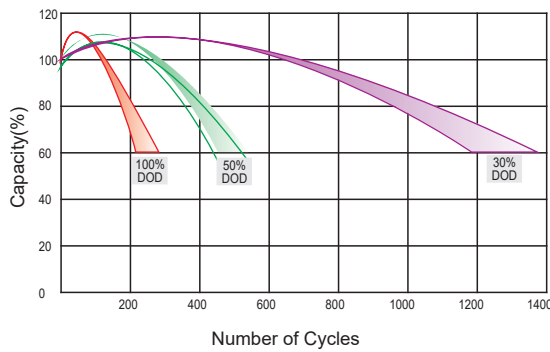
Charge Characteristic Curve For Standby Use(IU)



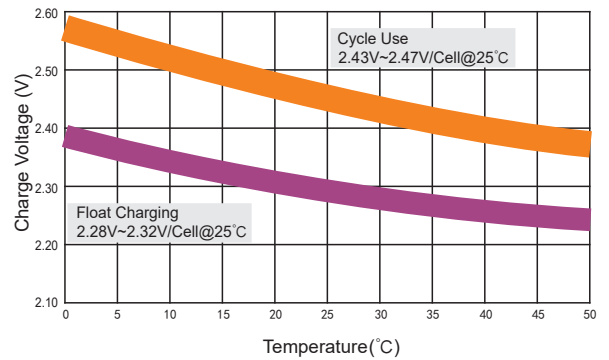
Discharge Characteristics Curve



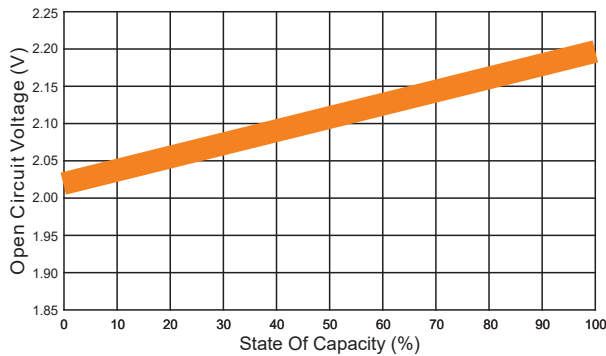
Cycle Life In Relation To Depth Of Discharge



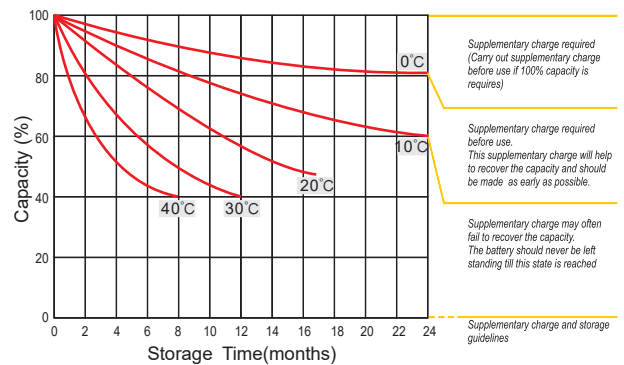
Relationship Between Charging Voltage And Temperature



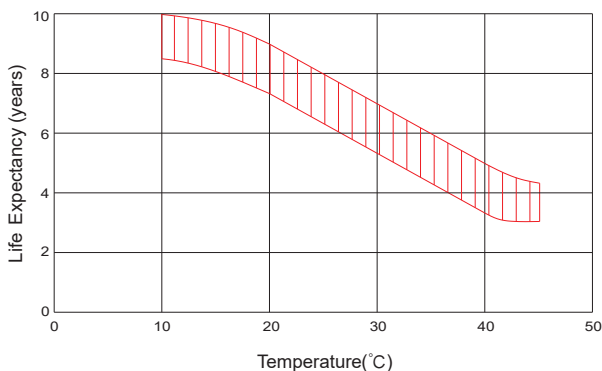
Relationship of OCV And State of Charge(20°C)



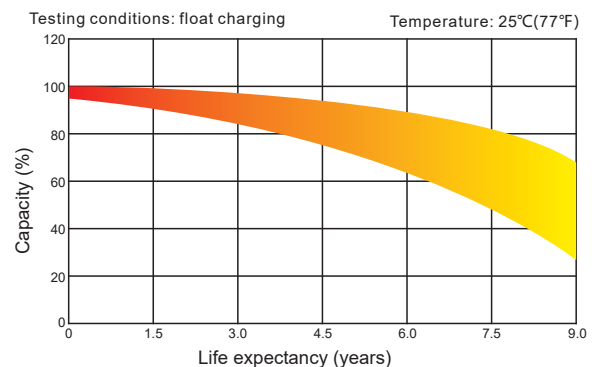
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



IMPORTANT NOTE: The specifications presented herein are subject to revision without notice.

