

# KBF121900 12V 190Ah



The Front Terminal Kaise batteries consists in VRLA batteries - with AGM technology (Absorbent Glass Mat), with a design life of 10-12 years. They are used mostly for the telecommunications industry, guaranteeing that in case of an electric power cut, the Kaise batteries immediately provide the necessary energy supply, as a backup energy system for the simple or most complex energy systems.

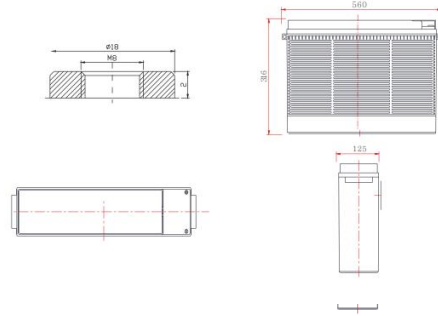
## Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	560 / 22.0
	Width (mm / inch)	125 / 4.92
	Height (mm / inch)	316 / 12.4
	Total Height (mm / inch)	316 / 12.4
Approx. Weight	(Kg / lbs) 53.5 / 118	
Design Life	12 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	190 Ah / 19.0 A	(10hr, 1.80V / cell, 25°C / 77°F)
	164 Ah / 32.8 A	(5hr, 1.75V / cell, 25°C / 77°F)
	119 Ah / 119 A	(1hr, 1.65V / cell, 25°C / 77°F)
Short-Circuit Current	2400A	
Internal Resistance	Approx 5.0mΩ	
Operating Temp. Range	Discharge : -20 ~ 50°C (-4 ~ 122°F)	
	Charge : -20 ~ 50°C (-4 ~ 122°F)	
	Storage : -20 ~ 50°C (-4 ~ 122°F)	
Cycle Use	Initial Charging Current less than 47.5A Voltage: 14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient: -30mV/°C	
Standby Use	Initial Charging Current less than 47.5A Voltage: 13.5V ~ 13.8V at 25°C (77°F) Temp. Coefficient: -18mV/°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 Front Terminal 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.	

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

Volts/cell	5min	15min	30min	1h	2h	3h	5h	10h
1.80V	226	218	173	113	66.3	48.3	31.9	19.0
1.75V	253	234	181	115	67.6	48.7	32.8	19.2
1.70V	275	242	183	117	68.6	49.2	33.2	19.4
1.65V	286	247	187	119	69.1	49.9	33.5	19.6
1.60V	291	253	190	121	69.5	50.5	33.9	19.8

## Dimensions and Terminal (Unit: mm (inches))



## Applications

- Renewable Energy
- Alarm systems
- Electric Test Equipment
- Emergency lighting systems
- Marine equipment
- Telecommunications systems

## 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

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

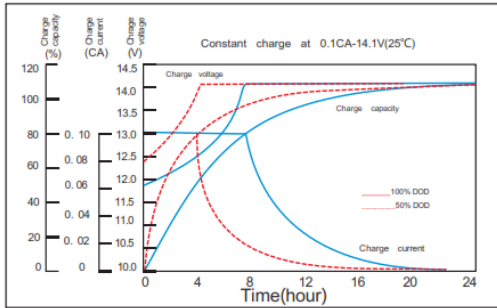
Volts/cell	5min	15min	30min	1h	2h	3h	5h
1.80V	384	392	332	217	129	93.3	62.3
1.75V	430	421	338	221	131	93.7	63.0
1.70V	467	435	340	225	133	94.2	63.3
1.65V	486	444	342	227	134	94.7	63.9
1.60V	494	456	344	231	135	96.0	64.2

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

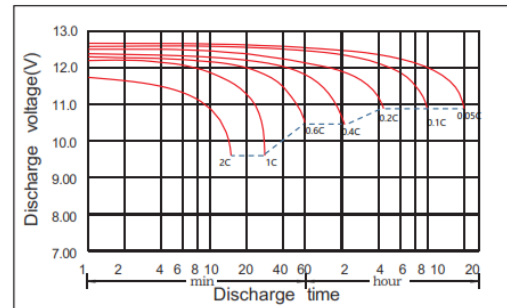
**KBF121900** 12V 190Ah



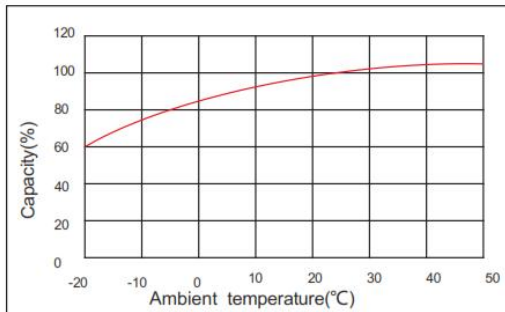
**Charging Characteristic**



**Self Discharge Characteristics**



**The effect of temperature on capacity**



**The effect of discharge depth on cycle life**

