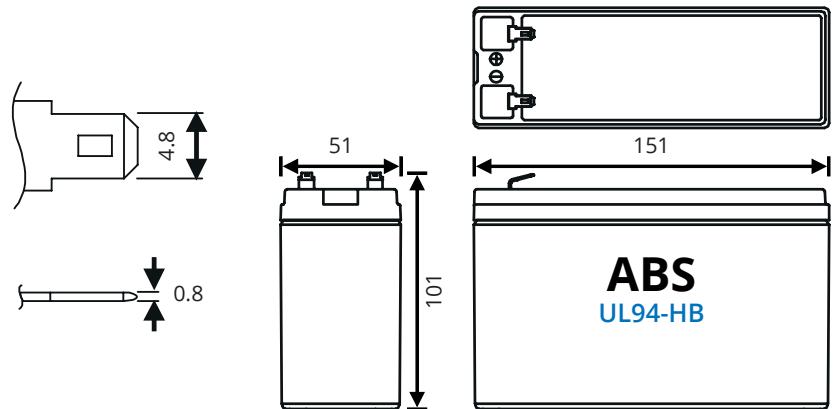


HR 6.5-12 - High Rate Series

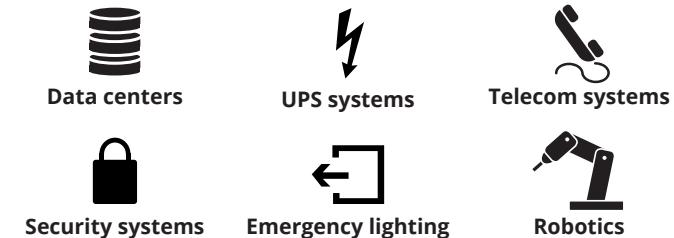
VRLA Battery



Technical Specifications

Nominal voltage	12 V
Nominal capacity (1.60V/c, 25°C)	20Hr: 6.86 Ah 1Hr: 4.32 Ah
Nominal power (1.60V/c, 25°C)	10Min: 35.3 W/cell
Internal resistance	≤16mΩ (fully charged)
Maximum charge current	1.8 A
Maximum discharge current	90 A (max. 5 sec)
Float use / cyclic use	13.5 - 13.8V / 14.4 - 15.0V
Operating temperature range	-15°C ~ 50°C
Designlife (20°C)	3 - 5 years in float (Eurobat)
Standard terminal	Faston 4.8mm (T1)
Housing material	ABS (UL94 HB)
Dimensions Length	151 mm
Dimensions Width	51 mm
Dimensions Height	101 mm
Approximate Weight	2.00 kg
Packing	10 pcs / box

Typical applications



Features

- Absorbent Glassmat Technology (AGM)
- Valve Regulated Lead Acid (VRLA)
- Maintenance free
- UL94-HB Flame retardant casing
- UL certified
- Low self discharge
- Classified as non-spillable and Non Dangerous goods by IATA, FAA, ADR, IMDG
- Can be discharged or stored in any position without leakage
- Cannot be charged while terminals are downwards

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

F.V/TIME	5 Min	10 Min	15 Min	30 Min	60 Min	3 Hr	5 Hr	10 Hr	20 Hr
1.80V/cell	22.6	15.7	12.2	7.19	3.85	2.01	1.032	0.612	0.327
1.75V/cell	24.9	16.8	12.9	7.46	4.00	2.12	1.071	0.619	0.332
1.70V/cell	27.0	17.7	13.4	7.69	4.13	2.21	1.097	0.626	0.337
1.65V/cell	28.6	18.4	13.7	7.90	4.24	2.29	1.12	0.631	0.341
1.60V/cell	29.8	19.0	13.9	8.07	4.32	2.34	1.13	0.636	0.343

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

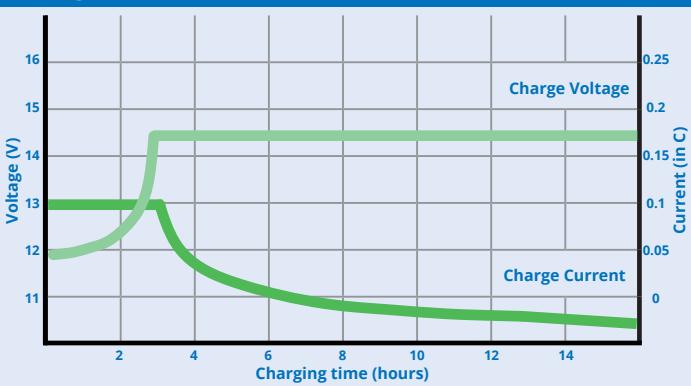
F.V/TIME	5 Min	10 Min	15 Min	30 Min	60 Min	3 Hr	5 Hr	10 Hr	20 Hr
1.80V/cell	43.7	29.2	22.4	14.3	7.73	4.65	2.14	1.29	0.700
1.75V/cell	47.3	31.3	23.8	14.8	8.03	4.87	2.22	1.30	0.709
1.70V/cell	50.4	33.0	25.0	15.2	8.30	5.02	2.29	1.31	0.717
1.65V/cell	52.4	34.3	25.8	15.6	8.48	5.13	2.34	1.32	0.723
1.60V/cell	54.0	35.3	26.3	15.9	8.64	5.22	2.37	1.33	0.726

*: Battery consists of 6 cells

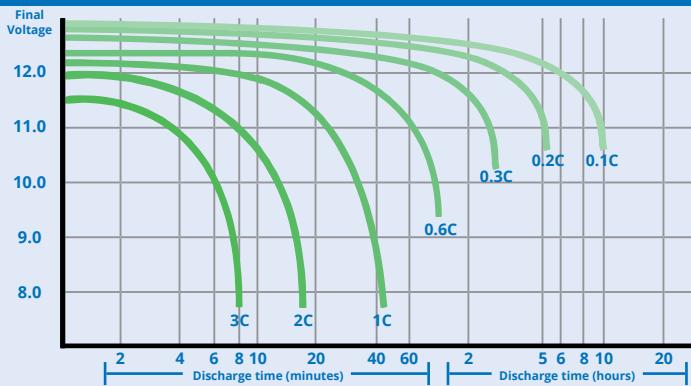
HR 6.5-12 - High Rate Series

VRLA Battery

Charge characteristics



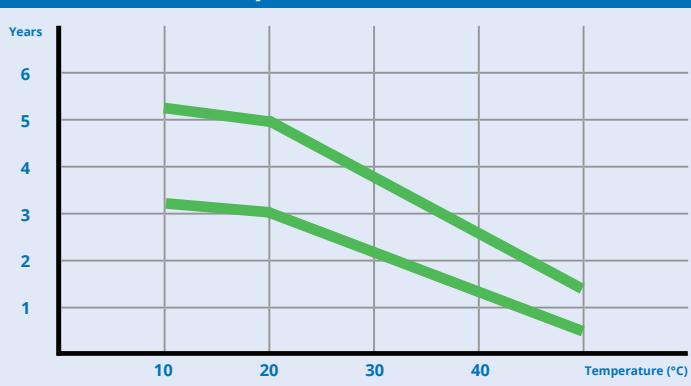
Discharge characteristics



Charge Voltage vs Temperature



Service life vs Temperature



Certifications and Standards

ISO 9001 ISO 14001 ABS UL94-HB



High Rate series

Pbq High Rate AGM batteries are ideal for applications that require high (start) currents. The main advantage of a High Rate battery over a battery from the General Purpose range, is that these are able to deliver more power within a shorter time from a similar battery casing, without sacrificing battery service life. Pbq High Rate batteries have, just like batteries from the General Purpose series, a EUROBAT design life of 3 - 5 years.

In order to be able to deliver high currents in a short period of time, pbq High Rate batteries contain additional lead plates in the same housing. As a result, pbq High Rate batteries have a higher energy density and are therefore able to provide reliable emergency power. Compared to AGM batteries from the General Purpose battery series, High Rate batteries are on average able to deliver up to 30% more power from the same housing.

Innovative technology

In order to keep grid-corrosion and current per cm² at acceptable levels, the pbq HR Discharge batteries are constructed around a larger area for both positive and negative material. This is done by adding extra plates in the same volume. Rather than use electrolyte with a higher specific gravity, a method rejected by pbq since this will reduce the functional life of the batteries to unacceptable levels.

High-quality accessories

Charging or discharging a battery in an incorrect manner has a major detrimental effect on its service life and performance, resulting in worse performance and earlier replacement than otherwise would have been necessary. This is not beneficial to the reliable operation of your application. That is why pbq offers a variety of high-quality accessories to compliment your battery system, allowing for better performance and longer service life. Ask your pbq distributor for more information.

Model	Voltage (V)	Capacity (Ah)	Dimensions lxwxh (mm)	Weight (kg)
pbq HR 6.5-12	12	6.5	151x51x101	2.00
pbq HR 9-12	12	9.0	151x65x102	2.70
pbq HR 22-12	12	22.0	181x76x167	6.70
pbq HR 40-12	12	40.0	165x125x175	9.60
pbq HR 50-12	12	50.0	197x165x171	14.30