

Basic Specifications

Voltage:	12 Volt
Capacity:	20 hour rate: 9.0Ah 10 hour rate: 8.4Ah 5 hour rate: 7.7Ah
Design life:	3 - 5 Years
Appr. dimensions:	151x65x94/102mm (LxWxH) (±2mm)
Terminal:	Faston Tab 6.4mm T2
Container & lid:	Flame retardant ABS
Internal Resistance:	14mΩ (Fully charged)
Approximate weight:	2.7kg
Max charge current:	2.7A
Max discharge current:	135A (5 sec.)
Operating temp. range:	-20°C ~ +50°C
Self discharge:	lower than 3% per month

Typical Applications

- UPS / Emergency Power
- Data center
- Hospitals
- Electric bikes, scooters and other vehicles
- (emergency) lights, pumps and valves
- Lawn movers
- Tools

Discharge data in Watts (25°C)

	(V/cell)	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
End Voltage	1,80V	361	234	187	97	62,4	26,1	17,9	10,1	5,29
	1,75V	388	252	194	102	64,2	26,9	18,3	10,3	5,41
	1,70V	407	264	200	106	65,8	27,7	18,6	10,5	5,44
	1,65V	427	277	208	108	67,6	28,5	18,9	10,7	5,48
	1,60V	448	290	216	114	68,8	29,1	19,1	10,8	5,51

Discharge data in Amperes (25°C)

	(V/cell)	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
End Voltage	1,80V	32,6	20,4	14,9	8,45	5,29	2,18	1,51	0,84	0,44
	1,75V	35,0	21,9	15,8	8,93	5,37	2,23	1,53	0,86	0,45
	1,70V	36,7	22,9	16,5	9,35	5,45	2,27	1,55	0,87	0,46
	1,65V	38,5	24,1	17,3	9,77	5,52	2,31	1,57	0,88	0,46
	1,60V	40,3	25,2	18	10,2	5,57	2,34	1,58	0,88	0,47

pbq High Rate series

The range of special High Discharge models offer excellent characteristics for applications that require very high discharge rates. For example, the 12V 9Ah High Rate battery has dimensions equal to those of a standard 12V 7Ah battery but delivers nearly 30% more power. While the 12V 33Ah High Rate battery comes in the shape of a standard 12V 28Ah battery.

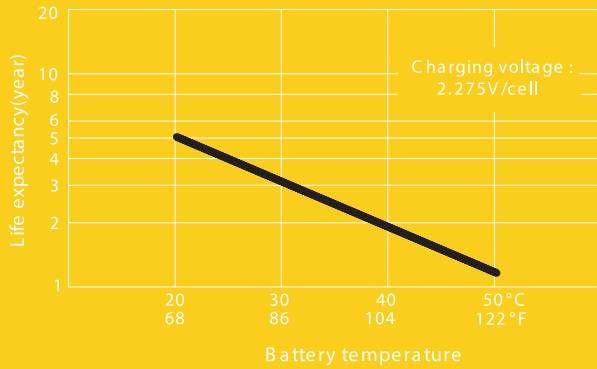
12V 22Ah High Rate battery

The pbq 22HR-12 is a 22Ah battery especially designed for customer requiring a battery in the shape of a standard 12V 18Ah battery but with increased capacity. Imagine the case where you change your computer system and find out that a controlled shutdown takes longer than your UPS is able to deliver! Just exchange the standard batteries with the pbq HR 22-12 and you instantly gain more backup time. Being able to deliver a 100A current during 5 minutes and even much higher start-up currents makes this battery also ideally suited as a stand-by power source for electric motors, cooling equipment etc.

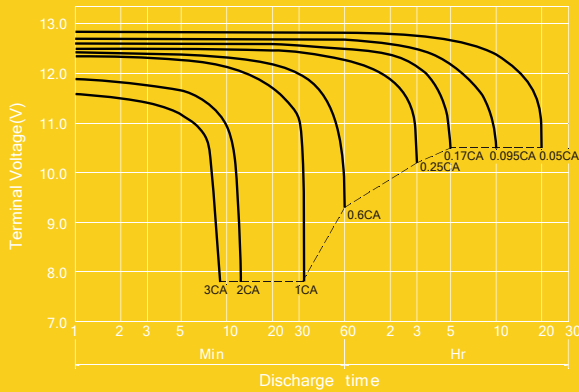
High Rate battery technology

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.

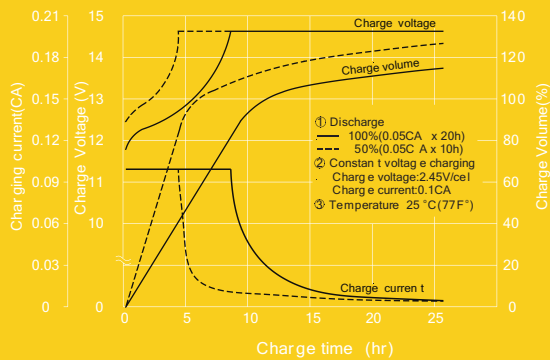
Effect of Temperature on Long term Float Life



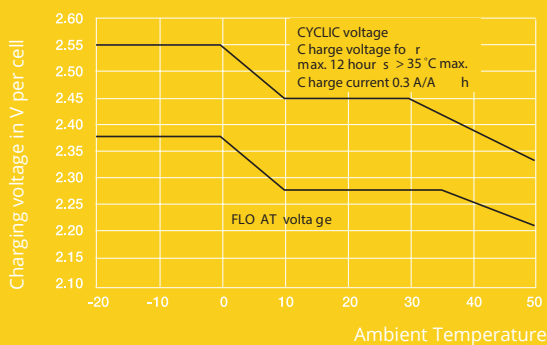
Discharge Time VS. Discharge Current (25°C)



Battery Charging Characteristics



Charging voltage and temperature



Models available

Model pbq	Capacity in Ah	Dimensions (±2mm) (LxWxH1/H2)	Weight
pbq HR 6.5-12	7	151x51x97,5mm	2.1 kg
pbq HR 9-12	9	151x65x102mm	2.7 kg
pbq HR 22-12	22	181x76x167mm	6.7 kg
pbq HR 40-12	40	195x129x179mm	12.1 kg
pbq HR 50-12	50	197x165x171mm	15.3 kg

Certificates



Features

- Absorbent Glassmat Technology
- 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 the terminal is downward.