

**General purpose batteries**

*12 volt range*

With a range of well over 50 models, pbq offers one of the widest selections in the battery industry. The batteries are designed with the cost and quality conscious user in mind offering an excellent price/performance ratio. The functional life is 4-5 years at an operating temperature of 25°C.

**Typical applications:**

- toys
- household appliances
- sensors
- UPS systems
- integrated emergency power supplies
- telecommunication equipment
- garden tools

**VdS approved VRLA Batteries**

The VdS-approved pbq batteries form a special range that has been tested and qualified by the German VdS institute. The concept behind VdS recognition; ensuring tested and certified quality in the products and services being offered in the safety and security markets, is of equally advantageous for user and supplier.

Safety and security systems are approved by the VdS and monitored in subsequent use to protect property and life and help to keep a insurance premiums lower.

Apart from the VdS approval, this range is also approved by the Dutch NCP institute, further underlining the high quality of this range.

**Typical applications:**

- VdS & NCP approved alarm systems
- Fire & burglar alarmsystems

**Models available**

Model pbq...	Capacity in Ah	Dimensions (LxWxH1/H2)	Weight
0.8-12	0.8	96x25x62mm	360gr
1.2-12	1.2	98x48x51/57mm	550gr
1.3-12	1.3	98x48x51/57mm	560gr
2-12PC	2	144x24x65mm	870gr
2.3-12PC	2.3	182x24x61mm	980gr
2.3-12	2.3	178x35x61/67mm	990gr
2.6-12	2.6	178x34x61/66mm	1kg
2.9-12	2.9	79x56x98.5/102mm	1.1kg
3.2-12	3.2	134x67x61/67mm	1.2kg
3.4-12	3.4	134x67x61/67mm	1.3kg
4-12	4	195x47x70/74mm	1.7kg
5.2-12	5.2	90x70x102/108mm	1.9kg
7-12	7	151x65x95/101mm	2.6kg
12-12	12	151x98x95/101mm	4.2kg
18-12	17	181x77x167mm	5.7kg
26-12	26	166x175x125mm	9.4kg
40-12	40	197x165x170mm	13.7kg
65-12	65	335x167x179/183mm	22kg

**Quality Control**

All pbq batteries are being produced against ISO 9002 and UL quality control standards. Furthermore, batteries are inspected again using the MIL-Std. 105B method of statistical analyses upon arrival in the central warehouses. At pbq we understand that a defective battery can mean loss of information, productivity, customers and increased service cost, all 'features' you can do without!

**Special Models**

Apart from the models listed here, pbq can arrange the design and production of special models. For OEM applications several designs have been made to suit specific applications, either in capacity or in dimensions. Contrary to popular believe, you will not need to order hundred thousands of batteries to justify the cost of this. Starting at around 20.000 units your own design can be commercially viable.

**VdS Numbers**

Model pbq...	Capacity in Ah	VdS Number
pbq 1.2-12	1.2	G104102
pbq 2.3-12	2.3	G104103
pbq 7-12	7	G104049
pbq 12-12	12	G104087
pbq 18-12	17	G104088
pbq 26-12	26	G104089
pbq 40-12	40	G104090

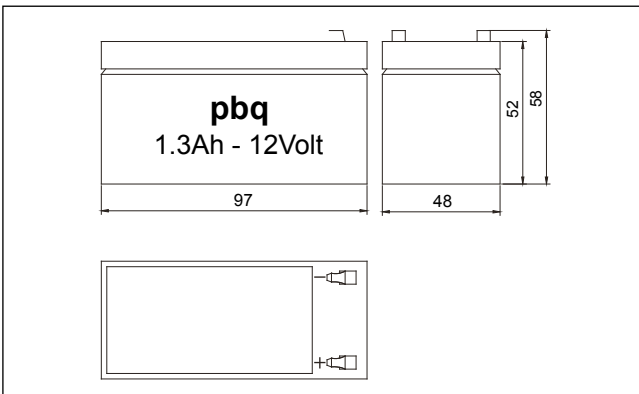
pbq 7-12



pbq 0.8-12



pbq 40-12



Voltage : 12 Volt  
 Capacity : 1.3Ah  
 Dimensions : 97x48x52/58mm (LxWxH)  
 Terminal : Faston 187  
 Container & lid : ABS  
 Approximate weight : 560gr  
 Packing : 20/box, 12.7kg  
 1.300/pallet, 875kg

- Typical Applications:**
- Toys
  - Fire & burglar alarmsystems
  - Household appliances
  - Garden tools
  - Telephone exchanges
  - Sensors
  - Measurement devices

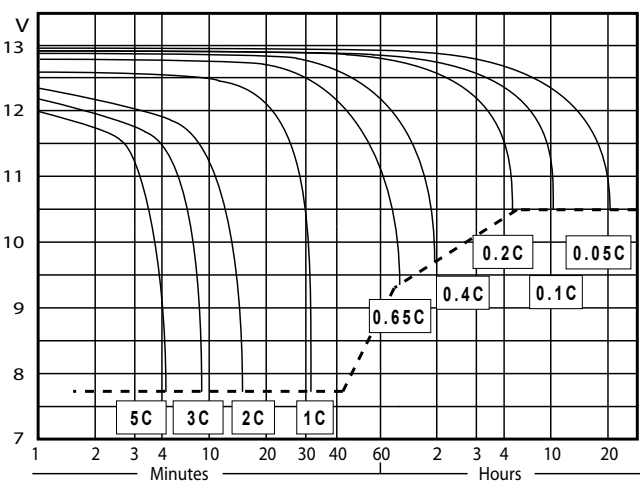
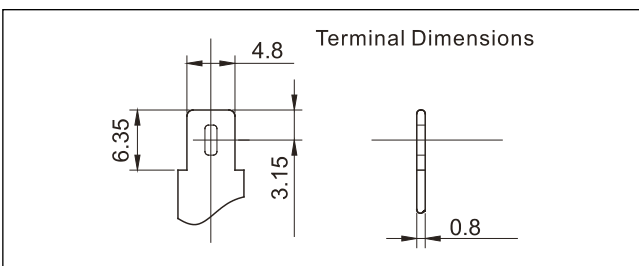
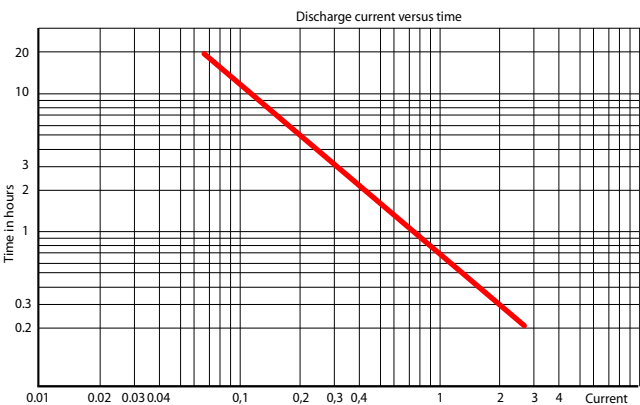
**Capacity**  
 20 hour rate (65mA) : 1.3Ah  
 10 hour rate (120mA) : 1.2Ah  
 5 hour rate (220mA) : 1.1Ah  
 1 hour rate (730mA) : 0.73Ah  
 15 min rate (2.2A) : 0.55Ah

**Internal Resistance (fully charged) :** 110mOhm

**Capacity versus temperature**  
 40°C : 102%  
 25°C : 100%  
 0°C : 85%  
 -15°C : 65%

**Max. discharge current :** 18A (5 sec)

**Charge (constant voltage)**  
 Maximum charge current 0.35A  
 Float use: 13.6 - 13.9 Volt. -20mV/°C  
 Cyclic use: 14.5 - 14.9 Volt. -30mV/°C



Discharge data watt/battery

	Discharge time	5 min	10 min	15 min	30 min	1 hr	3 hr	5 hr	10 hr
End Voltage	10.80V	48.36	34.32	25.74	16.38	8.97	3.71	2.57	1.45
	10.50V	50.70	36.19	27.30	17.16	9.13	3.82	2.65	1.48
	10.20V	53.04	37.44	28.08	17.63	9.20	3.90	2.67	1.49
	9.90V	54.60	38.22	28.86	17.78	9.28	3.94	2.68	1.50
	9.60V	56.16	39.00	29.64	17.94	9.36	3.96	2.69	1.50