

10-year LongLife Series

These VRLA batteries use thicker plates than the standard 4-5 year models. The electrolyte is absorbed by the AGM separators and plates and therefore these batteries can be mounted in any position. The one-way valve allow gases to escape, avoiding excessive pressure build-up in the case of accidentally overcharge.

General Features

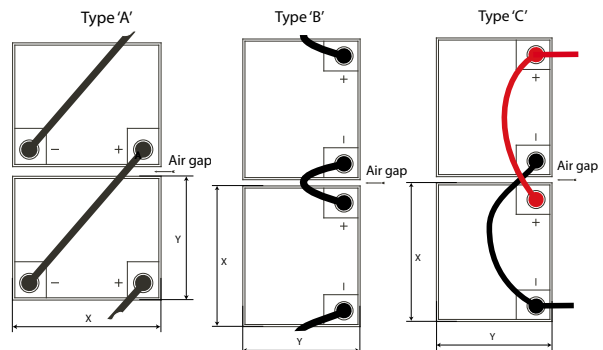
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications. Maintenance-free operation.
- Low self discharge.
- ABS case and cover.

Features

- High Reliability and Good Quality
- Deep Discharge Recovery
- High Power Density
- Long Service Life, in Float or Cyclic Not for so called SLI applications (Starter, Lighting and Ignition)
- International Standard, JIS and DIN

Models Available

Model pbq...	Capacity in Ah	Dimensions (±2mm) (LxWxH1/H2)	Weight
7-12L	7,0	151x51x94/100mm	2.35kg
12-12L	12,0	151x98x95/101mm	3.67kg
17-12L	17,0	181x77x167mm	5.5kg
28-12L	28,0	166x175x125mm	8.1kg
33-12LL	33,0	195x130x155/168mm	11kg
40-12LL	40,0	197.5x165.5x170mm	14.7kg
55-12LL	55,0	239x132x205/210mm	18kg
65-12LL	65,0	350x167x179mm	23.4kg
80-12LL	80,0	350x167x179mm	24kg
100-12LL	100,0	330x171x215/220mm	32kg
120-12LL	120,0	410x176x227mm	38kg
150-12LL	150,0	482x170x242mm	47kg
200-12LL	200,0	522x238x218/223mm	65kg
230-12LL	230,0	520x269x203/208	72.6kg
100-6LL	100,0	194x170x205/210mm	16.5kg
225-6LL	225,0	320x176x225/230mm	30.5kg



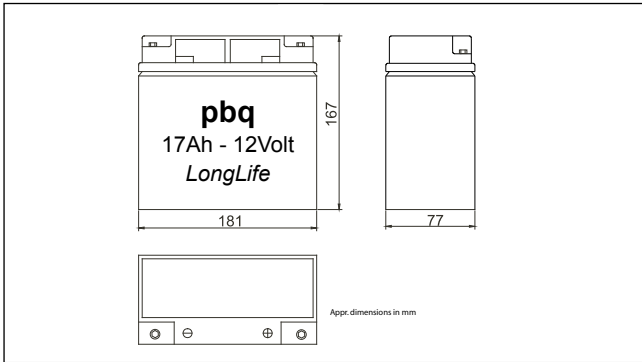
Battery	X [mm]	Y [mm]	Airgap [mm]	Type A connection	Type B connection	Type C connection	Connector size
pbq 33-12LL	195	130	5	ZKC250/6	ZKC100/6	ZKC250/6	M6 insert
pbq 40-12LL	197,5	165,5	10	ZKC250/6	ZKC100/6	ZKC250/6	M6 insert
pbq 55-12LL	239	132	10	ZKC250/6	ZKC100/6	ZKC250/6	M6 insert
pbq 65-12LL	350	167	10	ZKC320/6	ZKC100/6	ZKC240/6	M6 insert
pbq 80-12LL	350	167	10	ZKC320/6	ZKC100/6	ZKC240/6	M6 insert
pbq 100-12LL	330	171	10	ZKC320/6	ZKC100/6	ZKC240/6	M6 insert
pbq 120-12LL	410	176	10	ZKC420/8	ZKC125/8	ZKC420/8	M8 insert
pbq 150-12LL	482	170	10	ZKC550/8	ZKC125/8	ZKC550/8	M8 insert
pbq 200-12LL	238	522	10	ZKC550/8	ZKC125/8	ZKC420/8	M8 insert
pbq 230-12LL	269	520	10	ZKC700/8	ZKC125/8	ZKC420/8	M8 insert

Automotive posts: Set of one positive and one negative screw-in type automotive post M6: ZKTERM001
Automotive posts: Set of one positive and one negative screw-in type automotive post M8: ZKTERM002

Inter-tier connector cables

1 meter M6	ZKC1000/6	For pbq 33, 55, 65, 80 and 100Ah
2 meter M6	ZKC2000/6	For pbq 33, 55, 65, 80 and 100Ah
1 meter M8	ZKC1000/8	For pbq 120, 150, 200 and 230Ah
2 meter M8	ZKC2000/8	For pbq 120, 150, 200 and 230Ah

Type number key for cables
ZKCxxx/y
xxx = length between connecting holes in mm
y = bolt diameter
6: for 6mm bolt, 50mm² copper cable diameter
8: for 8mm bolt, 75mm² copper cable diameter



Voltage	: 12 Volt
Capacity	: 17Ah
Appr. dimensions	: 181x77x167mm (LxWxH) (±2mm)
Terminal	: M5 insert (<i>bolt supplied</i>)
Container & lid	: ABS
Approximate weight	: 5.5kg
Certificate(s)	: CE, EN60896-21/22:2004
RoHS Compliant	: Yes
Eurobat Compliant	: High Performance

- Typical Applications:**
- UPS Systems
 - Emergency lighting systems
 - Cordless cleaning equipment
 - Telecommunication systems
 - Auxiliary power supply for recreational vehicles and boats (non-SLI applications)
 - Measurement devices

Capacity

10 hour rate (1.7A)	: 17.0Ah
5 hour rate (2.94A)	: 14.7Ah
1 hour rate (12A)	: 12.0Ah

Internal Resistance (*fully charged*) : 16mOhm

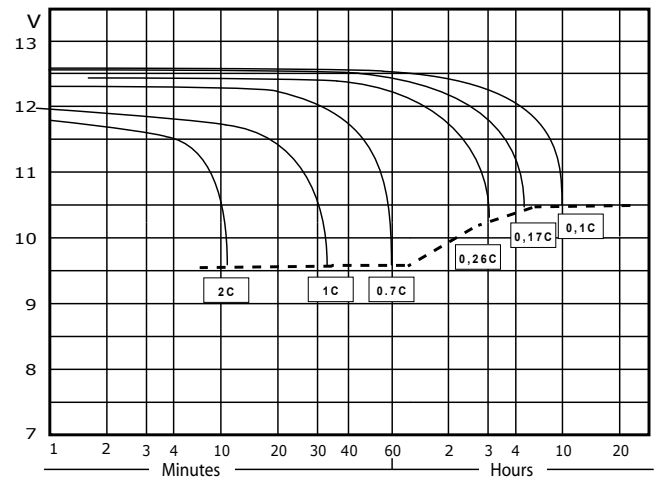
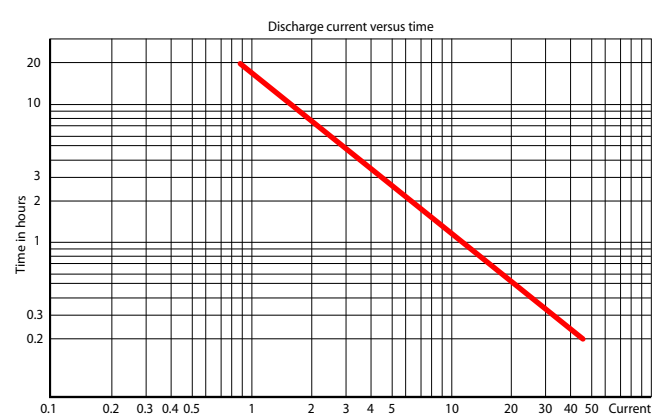
Operating Temperature Range:

Charge:	: -10°C ~ 60°C
Discharge:	: -20°C ~ 60°C
Storage:	: -20°C ~ 60°C

Max. discharge current : 170A (5 sec)

Charge (*constant voltage*)

Maximum charge current 5.1A
 Float use: 13.6 - 13.8 Volt. -20mV/°C
 Cyclic use: 14.4 - 14.7 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	24 hr
End Voltage	10.8	612	435	336	204	126	52.44	35.52	19.2	8.94
	10.5	636	444.6	343.8	207	127.8	52.98	35.64	19.32	9
	10.2	660	454.8	351	210	129	53.4	36.06	19.5	9.06
	9.9	678	464.4	355.2	213	130.8	54.06	36.54	19.68	9.12
	9.6	702	474	360	216	132	54.6	36.96	19.74	9.3