



PowerStor

Standby Battery Systems





PowerStor Standby Battery Systems

In today's environment battery systems must perform in the most challenging applications. The versatile PowerStor range of sealed lead acid batteries has all the answers with a wide choice of capacity ratings in compact cases for both standard and extended design life suitable for both cyclic and float applications.

BPC is at the forefront of modern power protection technology and our expertise in the design, development and manufacture of special and custom battery systems enables us to meet the diverse needs of the leisure, industrial, commercial, emergency services, medical and defence markets.



The PowerStor range has a wide choice of technologies and capacity ratings for both standard and extended design life suitable for engine starting, cyclic and float applications. BPC extended battery range & accessories includes:

- Sealed Lead Acid AGM Batteries
- Sealed Lead Acid Gel Batteries
- Rackmount Sealed Lead Acid AGM Batteries – Front Access
- Rackmount Sealed Lead Acid Gel Batteries – Front Access
- Nickel Cadmium Vented Alkaline Batteries
- Cycling Sealed Lead Acid Batteries for Electric Vehicle Applications
- Battery Enclosures
- Battery Options & Accessories
- Battery Monitoring Systems

PowerStor

PowerStor PS Range

Utilising the latest advanced absorbed glass mat (AGM) and gas recombination technology, PowerStor valve regulated sealed lead acid (VRLA) batteries ensure maintenance free, reliable performance, safety and outstanding service life with up to 5 years expectation in float standby applications.



PowerStor PSL Range

For mission critical standby applications requiring longer in service life the PowerStor PSL range is available with an enhanced grid and separator design. As a result of the largely increased battery life, up to 10 years in optimum float conditions, it is possible that electrical equipment can be supported throughout its own full service life without it being necessary to change the battery.

PowerStor PSLIFR Range

For larger mission critical applications requiring longer in service life the PowerStor PSLIFR range is available with an enhanced grid and separator design. Also provided are flame retardant case and lids with inserted pole terminals. As a result of the largely increased battery life, up to 15 years in optimum float conditions, it is possible that electrical equipment can be supported throughout its own full service life without it being necessary to change the battery.

PowerStor are built in accordance with the most stringent international standards and the PSLIFR range conforms to the following requirements:-

- JIS C 8702-1995
- IEC 1056-1
- DIN 43534
- UL 44VO
- BS 6290 part 4



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PowerStor PSLRACK Range

The PowerStor PSLRACK range of sealed lead acid batteries is designed for mission critical telecommunication and industrial applications requiring longer in service life up to 10 years in optimum float conditions. The batteries are designed to be compatible and able to fit in 19" telecom cabinets with ease. With a wide choice of capacity ratings in compact rackmount cases, the PSLRACK range can suit any autonomy requirements.



PowerStor Nickel Cadmium Range

PowerStor Nickel Cadmium Batteries are manufactured in basic ranges to match specific operating conditions and provide different performance characteristics. All nickel cadmium batteries use relatively expensive materials to combine maximum performance with minimum maintenance and optimum life of 20 to 25 years. Thus the nickel cadmium battery may be more expensive in the initial cost than lead acid batteries but will be considerably more cost effective over the long term.

PowerStor Gel Range

For mission critical deep cycle applications requiring longer in service life, the PowerStor Gel range is available with an enhanced grid / separator design and a gelled electrolyte introduced to the cell by means of custom built vacuum filling machine technology. As a result Gel batteries have many advantages over AGM such as full recovery from deep discharge, good tolerance to higher temperature applications, excellent performance over long discharges and improved charge acceptance due to low internal resistance so it is important to choose the right battery for your application.



PowerStor EV Range

Cyclic sealed lead acid batteries for electric vehicle applications. The versatile PowerStor EV range of sealed lead acid batteries offers higher performance against deep discharge, repeat daily cycling, higher temperature and mobile type applications. With a wide choice of capacity ratings in compact cases we can offer solutions for the most challenging applications.

Typical Applications

- Fire Alarm and Security Systems
- Industrial Control Systems
- Emergency Lighting
- Model and Toy Products
- Uninterruptible Power Supplies
- Sports and Leisure Equipment
- Computer/Network Products
- Mobility Vehicles
- Telecom Equipment
- Portable Equipment



General Features and Benefits

- **Low Self Discharge** Allowing the battery to be stored for extended periods without permanent loss of capacity
- **Electrolyte Suppression System** PowerStor's unique construction and sealing technique ensures no free electrolyte can escape
- **Operation in Any Orientation** Design flexibility allows operation in any orientation with no loss of performance or concern for electrolyte leakage (exception of continuous use in the inverted position)
- **Compact PowerStor Design** Offers a high energy density providing excellent power/volume/weight ratios
- **Float or Cyclic use High Performance Design** Allows use for both cyclic and continuous float applications
- **Wide Operating Temperature Range** PowerStor batteries can be operated in temperatures of -10°C to +50°C
- **Flexible Design** PowerStor batteries are manufactured using a range of terminals to suit most standard applications but custom designs are available
- **Deep Discharge Recovery** Unique processes are used in the grid alloy and electrolyte providing easy recharge to normal levels after being deeply discharged.

PowerStor

Battery Stands, Racks, Cabinets and Accessories

BPC offers a comprehensive range of battery accessories which include open steel battery stands, clad enclosed battery racks that can easily be assembled or disassembled and complete battery cabinet systems. These have been designed both technically and aesthetically to comprise an integral part of the equipment system, forming a single unit which can easily be located without the need for special site considerations. BPC also provides battery cable kits, DC switchable fuses and DC circuit breakers.



Installation and Support Solutions

The BPC Service department delivers and installs complete battery systems in even the most demanding environments. Our commitment is to achieve the highest levels of customer satisfaction by providing real solutions that work reliably and meet your specific needs. To ensure optimum customer care and system performance we go further by offering a total solutions approach from pre-sales advice and planning right through to installation and commissioning if required.



Preventative Maintenance Services

BPC's devotion to excellence is reflected in the enduring quality of its products and is matched by an equally lasting commitment to customer care. BPC has a service designed to identify partially discharged cells, oxidised connections, internal corrosion or loose connections thus detecting potentially faulty batteries before any harm is done. Detailed test results are then analysed and a battery management report issued with comments and recommendations. We also offer full battery replacement schemes, loan batteries, analysis of faulty cells and load testing when required.





PowerStor Battery Specifications

PS Battery Model	Volts	Rated Capacity (20hr rate) (AH)*	Approx. Dimensions			Approx. Weight (kgs)	Terminal Layout	Terminal Type
			Width (mm)	Depth (mm)	Overall Height (mm)			Standard
PS 10-6	6	10	50	151	99.5	1.8	1	B
PS 12-6	6	12	50	151	99.5	2.0	1	B
PS 2.2-12	12	2.2	34	177.5	66	1.0	1	A
PS 2.9-12	12	2.9	55	78	104	1.2	1	A
PS 3.3-12	12	3.3	67	133.5	67	1.4	2	A
PS 4.5-12	12	4.5	70	90	107	1.8	4	A
PSHR 5-12	12	5	48	140	108	1.9	1	A
PS 7-12	12	7	65	151	99	2.3	4	B
PS 7.5-12	12	7.5	65	151	99	2.5	4	B
PS 12-12	12	12	97	150	103	4.0	4	B

PSL Battery Model	Volts	Rated Capacity (20hr rate) (AH)*	Approx. Dimensions			Approx. Weight (kgs)	Terminal Layout	Terminal Type
			Width (mm)	Depth (mm)	Overall Height (mm)			Standard
PSL 9-12	12	9	65	151	99	2.6	4	B
PSL 18-12	12	18	76	181	167	5.5	2	15
PSL 26-12	12	26	168	178	124	8.0	2	15
PSL 35-12	12	35	130	195	160	10.4	1	16
PSL 44-12	12	44	167	198	157	13.3	2	16
PSL 55-12	12	55	138	229	213	17.0	1	16
PSL 70-12	12	70	168	260	211	24.3	1	16
PSL 70J-12	12	70	168	349	175	21.0	2	16
PSL 80-12	12	80	168	260	211	25.8	1	16
PSL 90-12	12	90	168	306	211	30.1	1	16
PSL 100-12	12	100	168	306	211	28.8	1	16
PSL 120-12	12	120	176	408	227	35.8	1	16
PSL 135-12	12	135	173	340	283	40.6	1	16
PSL 150-12	12	150	170	482	242	44.0	1	16
PSL 160-12	12	160	209	530	214	55.0	3	16
PSL 200-12	12	200	240	520	220	60.9	3	18
PSL 230-12	12	230	269	521	203	74.0	3	18
PSL 110-6	6	110	168	193	205	17.9	5	16
PSL 160-6	6	160	171	298	226	26.4	5	16
PSL 200-6	6	200	178	323	225	31.8	5	18

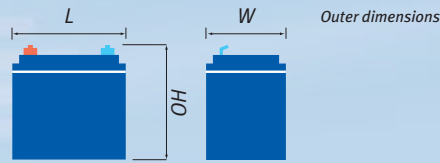
PSLIFR Battery Model	Volts	Rated Capacity (20hr rate) (AH)*	Approx. Dimensions			Approx. Weight (kgs)	Terminal Layout	Terminal Type
			Width (mm)	Depth (mm)	Overall Height (mm)			Standard
PSLIFR 50-2	2	50	50	161	166	3.2	2	16
PSLIFR 100-2	2	100	72	171	205	6.0	2	16
PSLIFR 150-2	2	150	102	172	205	8.1	2	16
PSLIFR 200-2	2	200	111	173	329	13.7	2	18
PSLIFR 300-2	2	300	151	171	330	18.1	2	18
PSLIFR 400-2	2	400	176	211	329	27.2	4	18
PSLIFR 450-2	2	450	187	223	351	29.5	4	18
PSLIFR 500-2	2	500	172	241	331	30.8	4	18
PSLIFR 600-2	2	600	175	301	331	39.0	4	18
PSLIFR 800-2	2	800	175	410	330	52.5	8	18
PSLIFR 1000-2	2	1000	175	475	328	63.5	8	18
PSLIFR 1250-2	2	1250	175	475	328	76.9	8	18
PSLIFR 1500-2	2	1500	351	401	342	102.2	8	18
PSLIFR 2000-2	2	2000	351	491	344	133.3	8	18
PSLIFR 3000-2	2	3000	353	762	341	200.0	8	18
PSLIFR 3850-2	2	3850	353	762	341	260.0	8	18

PSLRACK Battery Model	Volts	Rated Capacity (20hr rate) (AH)*	Approx. Dimensions			Approx. Weight (kgs)	Terminal Layout	Terminal Type
			Width (mm)	Depth (mm)	Overall Height (mm)			Standard
PSLRACK 55-12FA	12	55	105	277	223	18.9	FA	16
PSLRACK 80-12FA	12	80	114	563	182	26.2	FA	16
PSLRACK 95-12FA	12	95	109	507	227	30.8	FA	16
PSLRACK 100-12FA	12	100	110	395	285	35.0	FA	16
PSLRACK 100T-12FA	12	100	110	507	227	34.0	FA	16
PSLRACK 125-12FA	12	125	172	417	240	46.3	FA	16
PSLRACK 150-12FA	12	150	109	550	288	49.7	FA	16
PSLRACK 180-12FA	12	180	125	560	320	60.5	FA	18

Optional Terminal Types Available
FA – Front Access

PowerStor Terminal Layout and Type

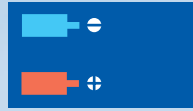
Terminal Layout



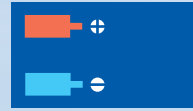
Terminal Layout 1



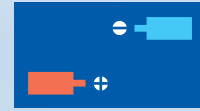
Terminal Layout 2



Terminal Layout 3

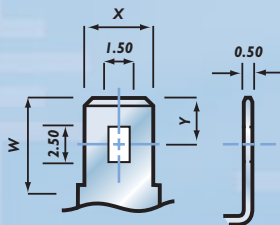


Terminal Layout 4



Terminal Layout 5

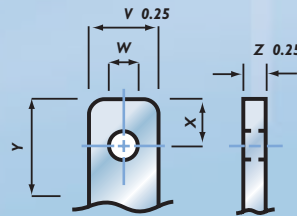
Terminal Type



Faston tab

Terminal type	W	X	Y
A	6.35	4.70	3.15
B	7.90	6.35	4.00

All dimensions in millimetres



Bolt Fastening Terminal

Terminal type	V	W	X	Y	Z	Bolt type
C	12.00	5.50	5.50	11.50	2.00	M5
D	15.00	5.50	7.50	15.00	5.00	M5
E	18.00	6.50	9.50	19.50	6.00	M6
F	16.00	6.50	9.50	15.00	6.00	M6
G	25.00	9.00	11.00	24.50	8.00	M8
H	26.50	9.00	12.00	28.00	8.00	M8



Inserted Terminal

Terminal type	V	W	Bolt type
I5	10.00	5.00	M5
I6	16.00	6.00	M6
I8	16.00	8.00	M8



The British Power Conversion Company

BPC EMEA Limited

BPC House
Romsey Industrial Estate
Greatbridge Road
Romsey
Hampshire SO51 0HR
United Kingdom

Tel: +44 (0) 1794 521200
Fax: +44 (0) 1794 521400
e-mail: sales@bpc-ups.com
www.bpc-ups.com