

PL Series & AFT Series VRLA Front Terminal Batteries

55–225 Ah* (12 Volt) Thin Plate Pure Lead and Lead-Calcium Batteries



PL Series

AFT Series

The SBS thin plate pure lead PL Series and the lead-calcium AFT Series are front terminal AGM VRLA batteries designed for mounting in cabinets or 19" or 23" relay racks.

The PL Series battery is designed for critical applications that require the longest and most reliable life possible. They are lighter, energy dense, and can handle high temperatures better than the AFT Series battery. The SBS Pure Lead batteries also have a 2 year shelf life at 77° F.

Construction

Series	AFT	PL
Plates	Lead-calcium-tin alloy	Thin plate pure lead
Casing Material	ABS jar/cover (FR UL94V-0 optional)	ABS jar/cover (FR UL94V-0 standard)
Float Voltage	2.25 V/cell	2.27 V/cell
Equalizing Voltage	2.35 V/cell	up to 2.40 V/cell
Temp. Range	5° to 130° F	-40° to 149° F
Capacity at 32° F	86%	86%
Design life at 77° F	up to 10 years	up to 15 years
Storage time at 77° F	6 months	2 years

Features

- Long float life
- Designed to fit on 19" or 23" relay racks
- Excellent high rate discharge performance
- Copper alloy terminal inserts
- Leak-free terminal seal
- 100% initial capacity
- Non-hazardous cargo for ground, sea and air transportation
- Handles for easy handling
- UL Listed - UL file no. MH19767

Additional PL Features/Advantages

- Pure lead positive plates for longest life
- UL94V-0 flame retardant jar/cover standard
- Up to 2 year shelf life at 77° F
- Fast charging acceptance

Technical Data

Part No.*	8 hr. Ah Rate	10 hr. Ah Rate	Voltage (V)	Dimensions L x W x H (in.)	19" or 23" Rack	Weight (lb.)	I.R. (mOhms)
12AFT110	100	103	12	15.50 x 4.33 x 11.20	19" or 23"	76.1	4.3
12AFT150	145	150	12	21.69 x 4.33 x 11.30	19" or 23"	103	3.0
12PLH100FT	96	101	12	15.63 x 4.25 x 11.30	19" or 23"	68.3	4.5
12PLH150FT	144	152	12	22.12 x 4.92 x 10.24	23"	101	3.6
12PLH190FT	182	192	12	22.10 x 4.92 x 12.60	23"	128	3.0

Applications

- Telecommunications
- UPS
- Utility
- Renewable
- Railway
- Emergency lighting

Performance Data

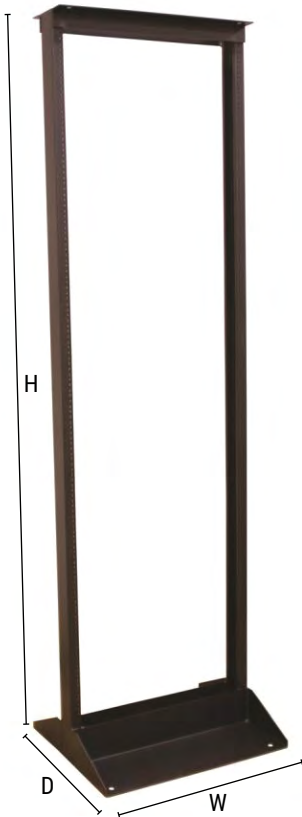
Constant current discharge data in Amperes to 1.75 V/cell at 77° F

Part No.*	10 min.	15 min.	20 min.	30 min.	45 min.	1 hr.	2 hr.	3 hr.	5 hr.	8 hr.	10 hr.	20 hr.
12AFT110	185	158	136	103	77.6	60.9	36.0	26.1	17.4	12.5	10.3	5.53
12AFT150	278	237	209	159	117.	94.1	53.9	39.2	26.1	18.1	15.2	8.02
12PLH100FT	221	179	148	108	77.7	60.9	34.4	25.5	17.4	12.0	10.1	5.26
12PLH150FT	323	266	224	167	123	97.9	54.6	39.7	26.5	17.9	15.2	8.07
12PLH190FT	390	324	264	196	144	115	66.6	48.4	32.3	22.7	19.2	10.1

*Additional models available. Please contact SBS for more information.

Relay Rack Systems

Relay Racks, Trays and Pre-Wired Systems



Relay Racks

- 19" and 23" rack configurations
- All steel construction
- Double return uprights provide extra strength
- Black powder coat finish

Standard Battery Trays

- 19" or 23" rack configurations
- 500 lb. capacity for 23" shelf
- 350 lb. capacity for 19" shelf
- Ideal for monobloc style batteries
- Black powder coat finish

Heavy Duty (HD) Battery Trays

- 23" rack configuration
- 650 lb. capacity
- Designed for front access batteries
- Welded heavy gauge steel construction
- Adjustable from six to eight rack units
- Restraining brackets to hold batteries
- Black powder coat finish

HD Tray Ordering Information

Part No.	Size	Inside Dimensions W x D (in.)
91302	23"	20.3 x 21.7

Relay Rack Ordering Information

Part No.	Size	Dimensions H x W x D (in.)	Weight (lb.)
94384	19"	84 x 20.3 x 20	66
94784	23"	84 x 24.3 x 20	70

Standard Tray Ordering Information

Part No.	Size	Inside Dimensions W x D (in.)
91304	19"	17.2 x 19.0
91305	23"	21.2 x 21.2



Standard



Heavy Duty



Pre-Wired Relay Racks

- 19" or 23" pre-wired racks
- 650 lb. capacity per tray
- Restraining brackets to hold batteries
- Two pole quick disconnect per string
- 850A busbar capacity
- Black powder coat finish

Pre-Wired Rack Part Number Configuration

91255 -				
1	2	3	4	5
1. Base Model No.	2. No. of Trays	3. Cable Size	4. Lug Hole Size	5. Strings per Tray
91254 (19" x 84"H)	1-5	02 = #2 04 = #4	A = #10 B = 1/4"	1 = One String 2 = Two Strings
or 91255 (23" x 84"H)		20 = 2/0 40 = 4/0	C = 5/16"	

The battery racks utilize our HD-Series Battery Trays which are optimized for the use of any front access battery. These racks come pre-wired with an Ultra Flexible MTW-style cable which terminates each battery string to the DC Junction Box located at the top of the rack.

For added safety, each tray is equipped with a 2-pole quick disconnect on each battery string for isolating individual strings during system maintenance. Just add batteries and intercell connectors for an effective solution for adding additional run time to any system.