

Motive Power Battery Range



Traction lead acid batteries, as the DC drive power of forklift, traction vehicles, transportation vehicles, tramcars etc., have a wide application in airport, station, port, vegetable and fruit markets and warehouses and so on. Also traction batteries, which are designed to be DC power of non-pollution transportation equipments, are widely used by buses, gymnastic and recreation locations. Traction batteries are fully compliant to BS standard or DIN standard.

Construction Features

- Nonwoven protective gauntlet, better elastic, less pore size, less electrical resistance and higher air permeability.
- Flexible, fully isolated connector prevents any creeping current.
- Flip top plugs with special electrolyte level indication.
- Automatic refilling plugs are also available (according request).
- Imported microporous catercorner separator with advanced quality provides higher porosity and lower electrical resistance.
- Containers and lids are made of polypropylene (PP). The impact resistance is very good.
- Patented terminal sealing construction fully prevents plate growth and electrolyte leakage.

Manufacturing Standards



Performance Advantages

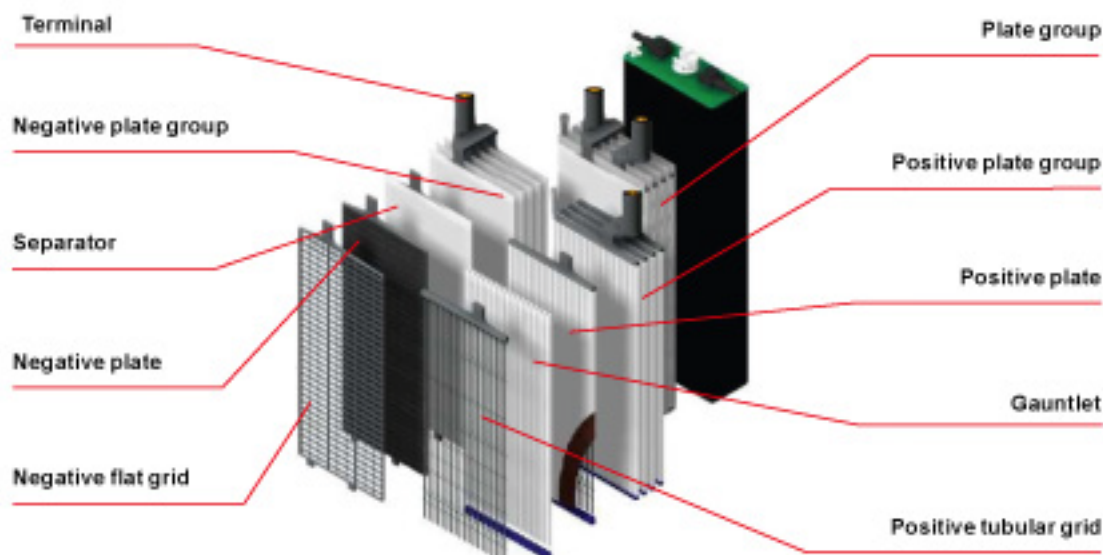
- Longer service life.
- Higher number of cycles.
- Reliable pillar sealing construction, absolute no pillar corrosion.
- Against short circuit design with the highest possible to prevent any short circuit.
- Flexible option for automatic refilling system and air circulation system.

Air Circulation System

- During the charge or discharge of the battery, the electrolyte (diluted sulfuric acid) is participating in the chemical reaction. This causes different gravity density of the electrolyte from upper part and lower part of the battery. The electrolyte in the bottom of the battery will be heavier. This is a stratification of the electrolyte.
- This has a negative effect on the charge and discharge performance of the battery. The air circulation system can eliminate this negative effect. During charge process, as soon as charge voltage approaches a certain value, the pump will be turned on. Air is pumped into each battery from one side. It creates a homogenous gravity density of the electrolyte via air circulation so as to eliminate the stratification directly.



Battery Construction



BS Series Battery

Model	Nominal Voltage (V)	Nominal Capacity C ₂₀ (Ah)	Approx Dimension (mm)				Approx Weight(Kg)		Discharge rate			
			L	W	H	Total H	No Electrolyte	With Electrolyte	5hr, F.V=1.70V/Cell		0.5hr, F.V=1.50V/Cell	
									Current(A)	Capacity(Ah)	Current(A)	Capacity(Ah)
2PzB110	2	110	45	158	402	430	6.4	8	22	110	110	55
3PzB165	2	165	61				8.7	11.5	33	165	165	82.5
4PzB220	2	220	77				11.3	14.5	44	220	220	110
5PzB275	2	275	93				13.7	18	55	275	275	137.5
6PzB330	2	330	109				16.2	21	66	330	330	165
7PzB385	2	385	125				18.7	24	77	385	385	192.5
8PzB440	2	440	141				21.1	27.5	88	440	440	220
9PzB495	2	495	157				23.6	30.5	99	495	495	247.5
10PzB550	2	550	173				26.5	34.5	110	550	550	275
2PzB130	2	130	45	158	457	485	7.3	9.5	26	130	130	65
3PzB195	2	195	61				10.1	13.5	39	195	195	97.5
4PzB260	2	260	77				13	17	52	260	260	130
5PzB325	2	325	93				15.8	20.5	65	325	325	162.5
6PzB390	2	390	109				18.6	24.5	78	390	390	195
7PzB455	2	455	125				21.5	28	91	455	455	227.5
8PzB520	2	520	141				24.8	32	104	520	520	260
9PzB585	2	585	157				27.6	36	117	585	585	292.5
10PzB650	2	650	173				30.5	39.5	130	650	650	325
11PzB715	2	715	189				33.3	42	143	715	715	357.5
2PzB140	2	140	45	158	500	528	7.9	10	28	140	140	70
3PzB210	2	210	61				11	14.5	42	210	210	105
4PzB280	2	280	77				14.1	18.5	56	280	280	140
5PzB350	2	350	93				17.2	22.5	70	350	350	175
6PzB420	2	420	109				20.2	26.5	84	420	420	210
7PzB490	2	490	125				23.3	30.5	98	490	490	245
8PzB560	2	560	141				26.9	34.5	112	560	560	280
9PzB630	2	630	157				30	39	126	630	630	315
10PzB700	2	700	173				33.1	43	140	700	700	350
2PzB160	2	160	45	158	554	582	8.9	11.5	32	160	160	80
3PzB240	2	240	61				12.3	16	48	240	240	120
4PzB320	2	320	77				15.8	20.5	64	320	320	160
5PzB400	2	400	93				19.2	25	80	400	400	200
6PzB480	2	480	109				22.7	29.5	96	480	480	240
7PzB560	2	560	125				26.7	34.5	112	560	560	280
8PzB640	2	640	141				30.7	39	128	640	640	320
9PzB720	2	720	157				33.6	43.5	144	720	720	360
10PzB800	2	800	173				37.1	48	160	800	800	400
2PzB180	2	180	45	158	620	648	10	13	36	180	180	90
3PzB270	2	270	61				13.8	17.5	54	270	270	135
4PzB360	2	360	77				17.7	23	72	360	360	180
5PzB450	2	450	93				21.6	28	90	450	450	225
6PzB540	2	540	109				26.1	33.5	108	540	540	270
7PzB630	2	630	125				30	39	126	630	630	315
8PzB720	2	720	141				33.9	43.5	144	720	720	360
9PzB810	2	810	157				37.8	48.5	162	810	810	405
10PzB900	2	900	173				41.6	54	180	900	900	450
2PzB200	2	200	45	158	690	718	11.2	14.5	40	200	200	100
3PzB300	2	300	61				15.5	20	60	300	300	150
4PzB400	2	400	77				19.8	25.5	80	400	400	200
5PzB500	2	500	93				24.1	31	100	500	500	250
6PzB600	2	600	109				29.2	37.5	120	600	600	300
6PzB700	2	700	125				33.5	43.5	140	700	700	350
8PzB800	2	800	141				37.8	48.5	160	800	800	400
8PzB900	2	900	157				42.1	54.5	180	900	900	450
10PzB1000	2	1000	173				46.5	60.5	200	1000	1000	500

DIN Series Battery

Model	Nominal Voltage (V)	Nominal Capacity C ₂₀ (Ah)	Approx Dimension (mm)				Approx Weight(Kg)		Discharge rate			
									5hr, F.V=1.70V/Cell		0.5hr, F.V=1.50V/Cell	
			L	W	H	Total H	No Electrolyte	With Electrolyte	Current(A)	Capacity(Ah)	Current(A)	Capacity(Ah)
2PzS110	2	110	47	198	339	370	6.5	8.5	22	110	110	55
3PzS165	2	165	65				9.1	12	33	165	165	82.5
4PzS220	2	220	83				11.7	15.5	44	220	220	110
5PzS275	2	275	101				14.3	18.5	55	275	275	137.5
6PzS330	2	330	119				16.9	22	66	330	330	165
7PzS385	2	385	137				19.5	26	77	385	385	192.5
8PzS440	2	440	155				22.1	29	88	440	440	220
2PzS140	2	140	47	198	404	432	8.1	10.3	28	140	140	70
3PzS210	2	210	65				11.3	14.5	42	210	210	105
4PzS280	2	280	83				14.5	19	56	280	280	140
5PzS350	2	350	101				17.8	23	70	350	350	175
6PzS420	2	420	119				21	27.5	84	420	420	210
7PzS490	2	490	137				24.2	31.5	98	490	490	245
8PzS560	2	560	155				27.9	36	112	560	560	280
9PzS630	2	630	173				31.2	40.5	126	630	630	315
10PzS700	2	700	191				34.4	44.5	140	700	700	350
12PzS840	2	840	227				40.9	54	168	840	840	420
2PzS160	2	160	47	198	469	497	9.2	11.6	32	160	160	80
3PzS240	2	240	65				13	17	48	240	240	120
4PzS320	2	320	83				16.7	22	64	320	320	160
5PzS400	2	400	101				20.4	26.5	80	400	400	200
6PzS480	2	480	119				24.2	31.5	96	480	480	240
7PzS560	2	560	137				28.4	36.5	112	560	560	280
8PzS640	2	640	155				32.1	42	128	640	640	320
10PzS800	2	800	191				39.6	51.5	160	800	800	400
2PzS200	2	200	47	198	569	597	12	15.5	40	200	200	100
3PzS300	2	300	65				16.5	21	60	300	300	150
4PzS400	2	400	83				22.4	27	80	400	400	200
5PzS500	2	500	101				26.4	34.5	100	500	500	250
6PzS600	2	600	119				32.5	40	120	600	600	300
7PzS700	2	700	137				37.5	45.5	140	700	700	350
8PzS800	2	800	155				42.5	51	160	800	800	400
9PzS900	2	900	173				48	59	180	900	900	450
10PzS1000	2	1000	191				53	64.5	200	1000	1000	500
3PzS360	2	360	65	198	720	750	20	25.5	72	360	360	180
4PzS480	2	480	83				26	33.5	96	480	480	240
5PzS600	2	600	101				32	41.5	120	600	600	300
6PzS720	2	720	119				38	49.3	144	720	720	360
7PzS840	2	840	137				44.5	56.6	168	840	840	420
8PzS960	2	960	155				50.5	63.5	192	960	960	480
10PzS1200	2	1200	191				61	78.5	240	1200	1200	600

BS High Energy Series Battery

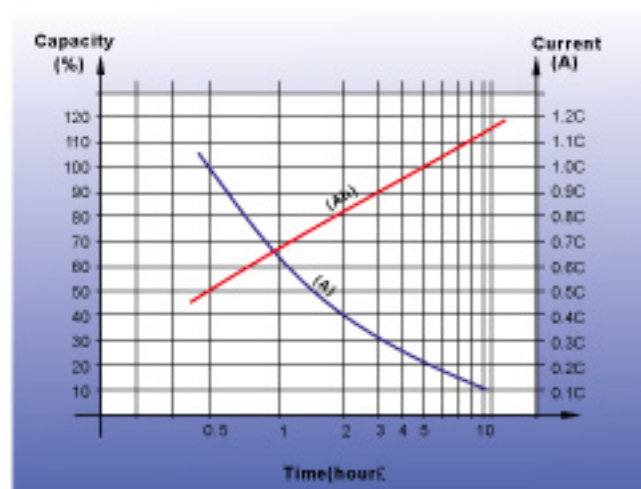
Model	Nominal Voltage (V)	Nominal Capacity C ₂₀ (Ah)	Approx Dimension (mm)				Approx Weight(Kg)		Discharge rate			
			L	W	H	Total H	No Electrolyte	With Electrolyte	5hr, F.V=1.70V/Cell		0.5hr, F.V=1.50V/Cell	
									Current(A)	Capacity(Ah)	Current(A)	Capacity(Ah)
2PzB112H	2	112	45	158	402	430	6.4	8.4	22.4	112	112	56
3PzB168H	2	168	61				8.5	11.3	33.6	168	168	84
4PzB224H	2	224	77				10.7	14.2	44.8	224	224	112
5PzB280H	2	280	93				12.9	17.2	56	280	280	140
6PzB336H	2	336	109				15.1	20.1	67.2	336	336	168
7PzB392H	2	392	125				17.3	23.2	78.4	392	392	196
8PzB448H	2	448	141				19.5	26.1	89.6	448	448	224
9PzB504H	2	504	157				21.7	29	100.8	504	504	252
10PzB560H	2	560	173				24	32.1	112	560	560	280
2PzB120H	2	120	45	158	402	430	6.6	8.2	24	120	120	60
3PzB180H	2	180	61				9	11.8	36	180	180	90
4PzB240H	2	240	77				11.7	14.9	48	240	240	120
5PzB300H	2	300	93				14.2	18.5	60	300	300	150
6PzB360H	2	360	109				16.8	21.6	72	360	360	180
7PzB420H	2	420	125				19.4	24.7	84	420	420	210
8PzB480H	2	480	141				21.9	28.3	96	480	480	240
9PzB540H	2	540	157				24.5	31.4	108	540	540	270
10PzB600H	2	600	173				27.5	35.5	120	600	600	300
2PzB140H	2	140	45	158	457	485	7.6	9.8	28	140	140	70
3PzB210H	2	210	61				10.5	14	42	210	210	105
4PzB280H	2	280	77				13.6	17.6	56	280	280	140
5PzB350H	2	350	93				16.5	21.2	70	350	350	175
6PzB420H	2	420	109				18.5	25.4	84	420	420	210
7PzB490H	2	490	125				22.5	29	98	490	490	245
8PzB560H	2	560	141				26	33.2	112	560	560	280
9PzB630H	2	630	157				28.9	37.3	126	630	630	315
10PzB700H	2	700	173				32	41	140	700	700	350
11PzB770H	2	770	189				35.4	45	154	770	770	385
2PzB150H	2	150	45	158	500	528	8.3	10.5	30	150	150	75
3PzB225H	2	225	61				11.5	15	45	225	225	112.5
4PzB300H	2	300	77				14.8	19.2	60	300	300	150
5PzB375H	2	375	93				18.1	23.4	75	375	375	187.5
6PzB450H	2	450	109				21.2	27	90	450	450	225
7PzB525H	2	525	125				24.5	31.7	105	525	525	262.5
8PzB600H	2	600	141				28.3	35.9	120	600	600	300
9PzB675H	2	675	157				31.5	40.5	135	675	675	337.5
10PzB750H	2	750	173				34.8	44.7	150	750	750	375
2PzB132H	2	132	45	158	514	540	8.3	10.5	30.4	132	132	66
3PzB198H	2	198	61				11.5	15	45.6	198	198	99
4PzB264H	2	264	77				14.8	19.2	60.8	264	264	132
5PzB330H	2	330	93				18.1	23.4	76	330	330	165
6PzB396H	2	396	109				21.2	27	91.2	396	396	198
7PzB462H	2	462	125				24.5	31.7	106.4	462	462	231
8PzB528H	2	528	141				28.3	35.9	121.6	528	528	264
9PzB594H	2	594	157				31.5	40.5	136.8	594	594	297
10PzB660H	2	660	173				34.8	44.7	152	660	660	330
2PzB180H	2	180	45	158	554	582	9.3	11.9	36	180	180	90
3PzB270H	2	270	61				12.9	16.6	54	270	270	135
4PzB360H	2	360	77				16.5	21.3	72	360	360	180
5PzB450H	2	450	93				20.2	26	90	450	450	225
6PzB540H	2	540	109				23.8	30.7	108	540	540	270
7PzB630H	2	630	125				28	35.8	126	630	630	315
8PzB720H	2	720	141				32.5	40.5	144	720	720	360
9PzB810H	2	810	157				35.3	45.2	162	810	810	405
10PzB900H	2	900	173				39	49.9	180	900	900	450
2PzB200H	2	200	45	158	620	648	10.4	13.5	40	200	200	100
3PzB300H	2	300	61				14.3	18	60	300	300	150
4PzB400H	2	400	77				18.4	23.7	80	400	400	200
5PzB500H	2	500	93				22.4	28.9	100	500	500	250
6PzB600H	2	600	109				27.1	34.5	120	600	600	300
7PzB700H	2	700	125				31.2	40.2	140	700	700	350
8PzB800H	2	800	141				35.2	44.8	160	800	800	400
9PzB900H	2	900	157				39.3	50	180	900	900	450
10PzB1000H	2	1000	173				43.2	55.7	200	1000	1000	500
2PzB210H	2	210	45	158	689	715	10.5	13.8	42	210	210	105
3PzB315H	2	315	61				14.9	19.4	63	315	315	157.5
4PzB420H	2	420	77				18.8	24.7	84	420	420	210
5PzB525H	2	525	93				22.9	30	105	525	525	262.5
6PzB630H	2	630	109				27	35.4	126	630	630	315
7PzB735H	2	735	125				31.3	40.8	147	735	735	367.5
8PzB840H	2	840	141				35.9	46.9	168	840	840	420
9PzB945H	2	945	157				39	51.1	189	945	945	472.5
10PzB1050H	2	1050	173				42.9	56.3	210	1050	1050	525
2PzB220H	2	220	45	158	690	718	11.6	14.9	44	220	220	110
3PzB330H	2	330	61				16.1	20.6	66	330	330	165
4PzB440H	2	440	77				20.5	26.3	88	440	440	220
5PzB550H	2	550	93				25	31.9	110	550	550	275
6PzB660H	2	660	109				30.3	38.6	132	660	660	330
7PzB770H	2	770	125				34.8	44.8	154	770	770	385
8PzB880H	2	880	141				39.3	50	176	880	880	440
9PzB990H	2	990	157				43.7	56.1	198	990	990	495
10PzB1100H	2	1100	173				48.3	62.3	220	1100	1100	550

DIN High Energy Series Battery

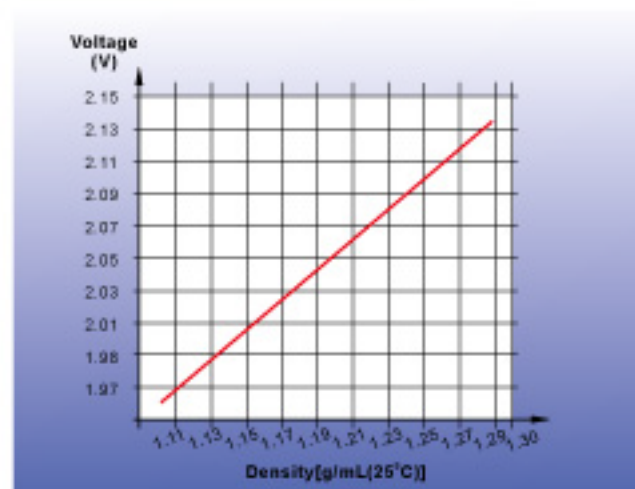
Model	Nominal Voltage (V)	Nominal Capacity C ₂₀ (Ah)	Approx Dimension (mm)				Approx Weight(Kg)		Discharge rate			
			L	W	H	Total H	No Electrolyte	With Electrolyte	5hr, F.V=1.70V/Cell		0.5hr, F.V=1.50V/Cell	
									Current(A)	Capacity(Ah)	Current(A)	Capacity(Ah)
2PrS120H	2	120	47	198	339	367	6.8	9.5	24	120	120	60
3PrS180H	2	180	65				9.5	12.5	36	180	180	90
4PrS240H	2	240	83				12.2	16.1	48	240	240	120
5PrS300H	2	300	101				15	19.2	60	300	300	150
6PrS360H	2	360	119				17.7	23	72	360	360	180
7PrS420H	2	420	137				20.4	27	84	420	420	210
8PrS480H	2	480	155				22.2	29.5	96	480	480	240
2PrS160H	2	160	47	198	404	432	8.5	11	32	160	160	80
3PrS240H	2	240	65				11.9	15.2	48	240	240	120
4PrS320H	2	320	83				15.4	20	64	320	320	160
5PrS400H	2	400	101				18.9	24.2	80	400	400	200
6PrS480H	2	480	119				22.3	29	96	480	480	240
7PrS560H	2	560	137				25.7	33.2	112	560	560	280
8PrS640H	2	640	155				29.6	38	128	640	640	320
9PrS720H	2	720	173				33.1	42.5	144	720	720	360
10PrS800H	2	800	191				36.5	47	160	800	800	400
12PrS960H	2	960	227				43.5	57	192	960	960	480
2PrS180H	2	180	47	198	469	497	9.7	12.5	36	180	180	90
3PrS270H	2	270	65				13.7	17.8	54	270	270	135
4PrS360H	2	360	83				17.7	23	72	360	360	180
5PrS450H	2	450	101				21.6	28	90	450	450	225
6PrS540H	2	540	119				25.6	33	108	540	540	270
7PrS630H	2	630	137				30.1	38.5	126	630	630	315
8PrS720H	2	720	155				34	44	144	720	720	360
10PrS900H	2	900	191				42	54.5	180	900	900	450
2PrS240H	2	240	47	198	569	597	12.9	16.5	48	240	240	120
3PrS360H	2	360	65				17.8	22.5	72	360	360	180
4PrS480H	2	480	83				24.1	29	96	480	480	240
5PrS600H	2	600	101				28.5	35	120	600	600	300
6PrS720H	2	720	119				35	43	144	720	720	360
7PrS840H	2	840	137				41	49	168	840	840	420
8PrS960H	2	960	155				45.9	55	192	960	960	480
9PrS1080H	2	1080	173				51.9	63	216	1080	1080	540
10PrS1200H	2	1200	191				57.5	69.5	240	1200	1200	600
2PrS250H	2	250	47	198	574	600	12.5	16	50	250	250	125
3PrS375H	2	375	65				17	22.5	75	375	375	187.5
4PrS500H	2	500	83				21.5	28.5	100	500	500	250
5PrS625H	2	625	101				26	35	125	625	625	312.5
6PrS750H	2	750	119				31	41	150	750	750	375
7PrS875H	2	875	137				35.5	47	175	875	875	437.5
8PrS1000H	2	1000	155				40	53.5	200	1000	1000	500
9PrS1125H	2	1125	173				45	59.5	225	1125	1125	562.5
10PrS1250H	2	1250	191				49.5	64	250	1250	1250	625
3PrS450H	2	450	65	198	720	750	22	28	90	450	450	225
4PrS600H	2	600	83				28.5	36.5	120	600	600	300
5PrS750H	2	750	101				35	45	150	750	750	375
6PrS900H	2	900	119				41.5	53	180	900	900	450
7PrS1050H	2	1050	137				48.5	61	210	1050	1050	525
8PrS1200H	2	1200	155				55	68	240	1200	1200	600
10PrS1500H	2	1500	191				68	84	300	1500	1500	750
2PrS310H	2	310	47	198	720	750	15	19	62	310	310	155
3PrS465H	2	465	65				21	27.1	93	465	465	232.5
4PrS620H	2	620	83				27	35.1	124	620	620	310
5PrS775H	2	775	101				33	43	155	775	775	387.5
6PrS930H	2	930	119				39	51.2	186	930	930	465
7PrS1085H	2	1085	137				45	59.1	217	1085	1085	542.5
8PrS1240H	2	1240	155				51	67.1	248	1240	1240	620
9PrS1395H	2	1395	173				57	75.2	279	1395	1395	697.5
10PrS1550H	2	1550	191				63	83.1	310	1550	1550	775

Performance Characteristics

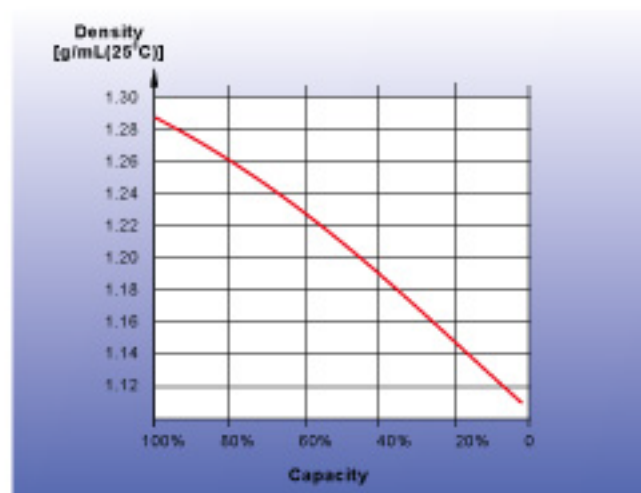
Discharge Characteristics



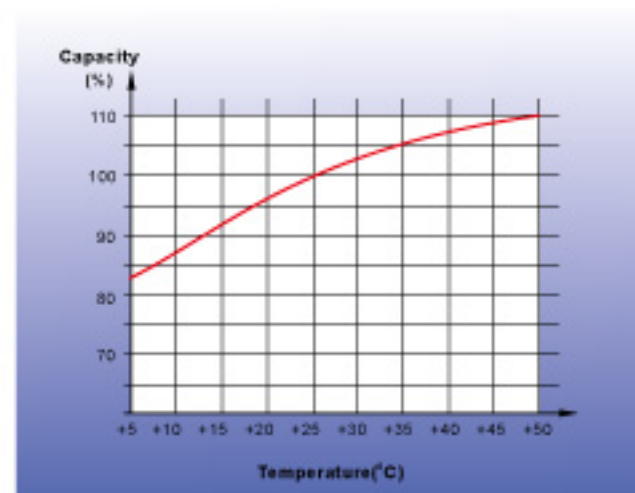
Density Effects in Relation to Voltage



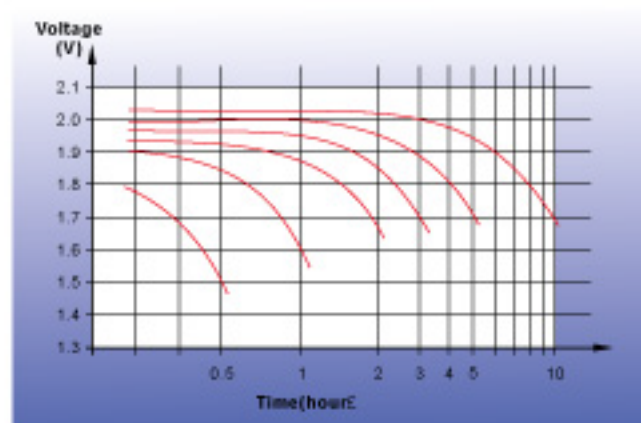
Density Effects in Relation to Capacity



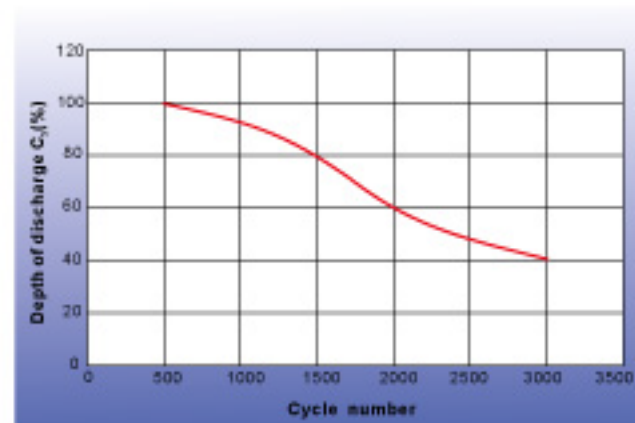
Temperature Effects in Relation to Battery Capacity



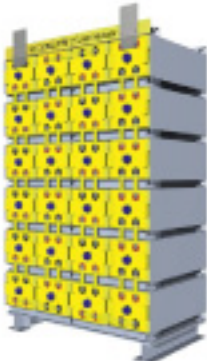
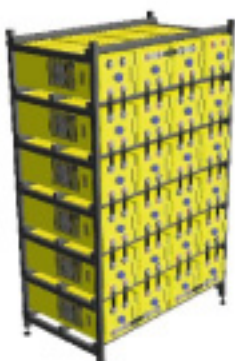
Discharge Characteristics



Cycle Life in Relation to Depth of Discharge



SEC Industrial Battery Co. range of products

			
CELLYTE 2CMT/G Modular Steel Rack	CELLYTE 2TLAM/G Tubular Steel Rack	CELLYTE 2CMT/G, CELLYTE 2TLAM/G with Catalyst	
			
CELLYTE 12PLF & 12PLT Range	CELLYTE 12FTA/G Range	CELLYTE 6-12TUA Range	CELLYTE 6-12TSG Range
			
CELLYTE 6-12TLA Range	CELLYTE 6-12TLG Range	MICROLYTE +Plus Range	MICROLYTE Red Top Range
			
CELLYTE 2ETG OPzV Range Tubular Steel Rack	SEC Tubular OPzS Range	Nickel Cadmium Range Pocket Plate flooded and Vp	Typical VRLA catalyst

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