DATASHEET (1/2)

Cyclic Application Battery

Range: **POWERBLOCK**
Type name: **DB12-19**

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PERFORMANCES*		CONFIGURATION	
Voltage:	12 V	Size:	182x77x168 mm
Capacity:	19 Ah (20h)	Polarity:	0
Cap. 5/10/100h:	16/18/20 Ah	Terminal:	P (flat lug)
Energy at 100h:	0,24 kWh	Holddown:	-
Cycles at 50%:	700	Ventilation	Valve regulated (VRLA)
Max. current:	270 A (5seg)	Maintenance:	Not required (MF)
Int. Resistance:	15 mΩ		
Self-Discharge:	15 months (from the date of production, at 25°C)		

*According to standards IEC 60254/60896

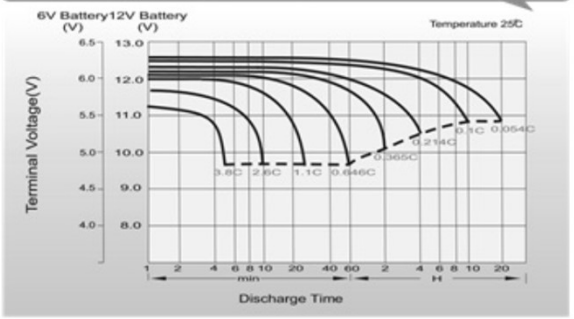
INTERNAL CONSTRUCTION		COMPONENTS	
Technology:	Manufacturer-sealed AGM	Container:	ABS/black
		Lid:	ABS/black
Alloy:	Calcium	Plugs:	Termal sealing, ABS/black
Separator:	AGM (glass mat)	Handles:	-
Total Weight:	6 kg		
Origin:	Nederland		

RECOMMENDATIONS	
Storage:	Check voltage every 8 months.
Recharge:	Use automatic chargers with constant voltage and AGM setup.
Installation:	Use the apropriate cable section and length. Keep connections tight.

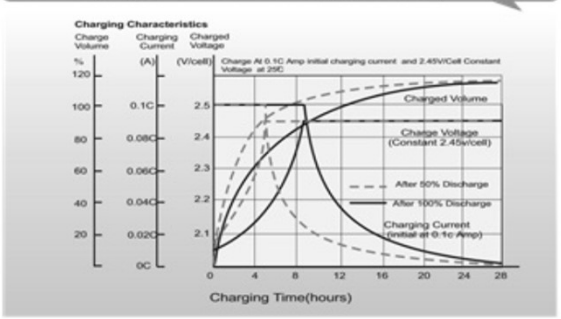
TABLES & CHARTS POWERBLOCK DB12-19

DB12-19 Constant Current Discharge (Amperes) at 25 °C														
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	26.4	22.2	19.4	13.9	11.1	8.99	5.58	4.35	3.53	2.87	2.50	2.04	1.70	0.956
1.80V/cell	33.7	26.8	22.9	16.5	12.9	10.1	6.09	4.68	3.77	3.08	2.68	2.16	1.80	0.965
1.75V/cell	37.0	29.3	24.6	17.1	13.4	10.5	6.32	4.77	3.85	3.16	2.75	2.20	1.82	0.974
1.70V/cell	40.3	31.2	25.9	17.8	13.9	10.9	6.57	4.90	3.95	3.24	2.81	2.23	1.84	0.992
1.65V/cell	43.5	33.2	27.5	18.8	14.2	11.2	6.75	5.11	4.09	3.33	2.87	2.27	1.87	1004
1.60V/cell	47.3	35.5	29.3	19.8	14.9	11.6	6.98	5.27	4.22	3.44	2.94	2.29	1.89	1010
DB12-19 Constant Power Discharge (Watts/cell) at 25 °C														
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	49.2	41.8	36.9	26.8	21.4	17.4	10.9	8.50	6.90	5.63	4.94	4.04	3.37	1.91
1.80V/cell	62.0	49.8	43.0	31.2	24.7	19.4	11.8	9.11	7.34	6.02	5.28	4.27	3.56	1.93
1.75V/cell	67.3	53.8	45.9	32.3	25.5	20.2	12.2	9.25	7.48	6.17	5.41	4.34	3.60	1.94
1.70V/cell	72.3	57.1	47.9	33.5	26.5	20.8	12.7	9.49	7.67	6.31	5.52	4.40	3.63	1.98
1.65V/cell	77.5	60.3	50.7	35.1	27.0	21.5	13.0	9.86	7.91	6.48	5.63	4.47	3.70	2.00
1.60V/cell	82.7	63.7	53.4	36.7	27.9	22.0	13.3	10.1	8.13	6.66	5.74	4.50	3.74	2.01

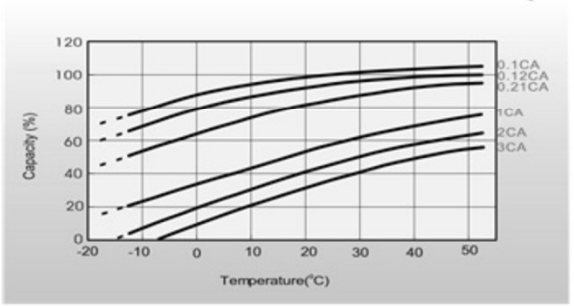
Discharge Characteristics



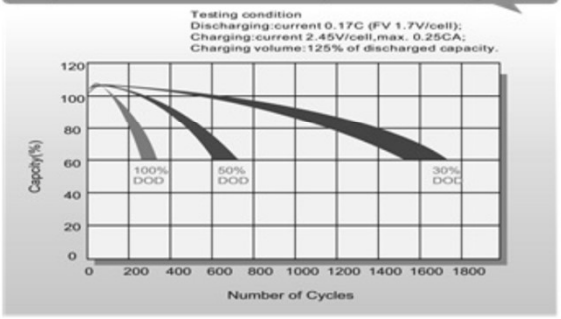
Charging Characteristics (cycle use)

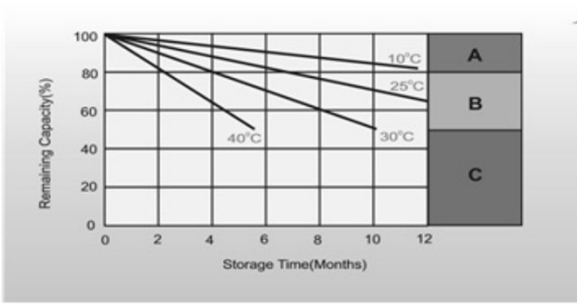


Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge





Self Discharge Characteristics

A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.