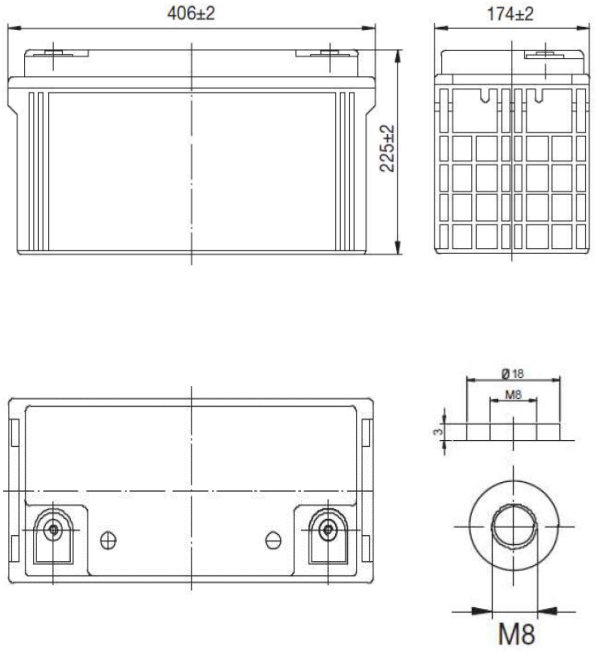
AccuForce S

AccuForce 12V - 140Ah S

AGM VRLA Battery

APPLICATIONS

- Solar / Wind power systems
- Residential installations
- Golf carts and electric powered vehicles
- Marine equipment
- Electric wheelchairs
- Traffic systems (signaling and lighting)
- Remote monitoring and controlling
- Power tools and cleaning machines
- Uninterruptible power supply (UPS)



SPECIFICATIONS

Nominal Voltage		12 V
Number of cells		6
Cycle life		Approx. 800 cycles at 50% DOD
Dimensions	Length	406 mm
	Width	174 mm
	Height	225 mm
	Total Height	225 mm
Weight		33.5 kg
Nominal Capacity (25°C)	120 hours rate (1.85)	142 Ah
	100 hours rate (1.85)	141 Ah
	48 hours rate (1.80)	134 Ah
	10 hours rate (1.80)	121 Ah
Internal Resistance (fully charged, 25°C)		4.00 mOhm
Self Discharge		approx. 3% per month at 25°C
Nominal Operating Temperature		25°C
Operating Temperature range	Discharge	-15°C to 45°C
	Charge	0°C to 40°C
	Storage	-15°C to 40°C
Float Charging Voltage		2.27 to 2.30 V/cell at 25°C
Temperature compensation		-18mV/°C
Cyclic Charging Voltage		2.40 to 2.47 V/cell at 25°C
Temperature compensation		-30mV/°C
Maximum charging current		36.0 A
Maximum discharge current (25°C)		1200 A (5 sec.)
Short Circuit Current (25°C)		1800 A

PERFORMANCE DATA

Discharge Constant Current at 25°C (Amperes)

End Voltage (V/cell)	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60V	203	122	75.8	44.2	30.9	25.4	21.7	18.8	14.8	12.4	6.47	---	---	---	---
1.65V	197	120	74.8	43.9	30.8	25.1	21.5	18.4	14.7	12.3	6.45	---	---	---	---
1.70V	191	116	72.9	43.6	30.6	25.0	21.4	18.4	14.6	12.2	6.43	2.84	---	---	---
1.75V	184	113	71.4	43.0	30.3	24.8	21.2	18.5	14.5	12.2	6.41	2.66	1.90	---	---
1.80V	173	109	69.3	42.0	29.4	24.1	20.6	17.9	14.0	12.1	6.36	2.79	1.88	---	---
1.85V	163	103	65.0	39.4	27.6	22.6	19.4	16.9	13.2	11.4	5.99	2.63	1.78	1.41	1.18

Discharge Constant Power at 25°C (Watts/Cell)

End Voltage (V/cell)	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60V	370	227	144	84.8	60.2	49.0	42.5	37.2	29.7	24.7	12.9	----	----	----	----
1.65V	361	223	142	84.3	60.0	48.8	42.2	36.5	29.3	24.5	12.9	----	----	----	----
1.70V	348	217	139	83.8	59.5	48.5	41.8	36.4	29.2	24.3	12.9	5.65	----	----	----
1.75V	336	212	136	82.8	59.2	48.3	41.3	35.8	28.8	24.2	12.8	5.63	3.78	----	----
1.80V	318	205	132	80.8	57.3	47.3	40.7	35.2	27.8	24.0	12.7	5.58	3.77	----	----
1.85V	299	192	124	75.8	53.8	44.3	38.2	32.9	26.2	22.5	12.0	5.25	3.53	2.83	2.37

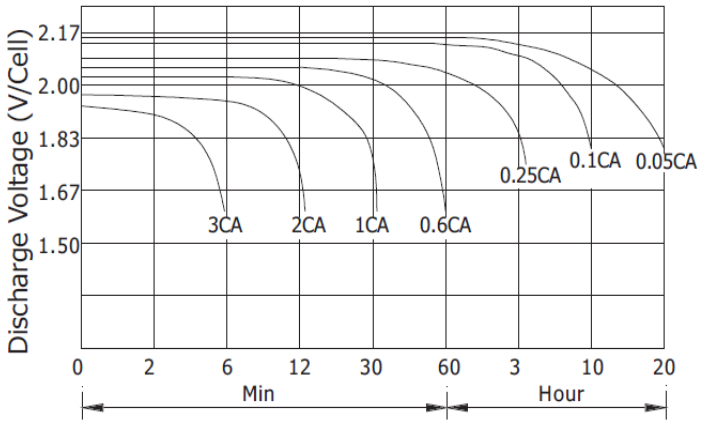
Note: The above characteristics data can be obtained within three charge/discharge cycles.

AccuForce S

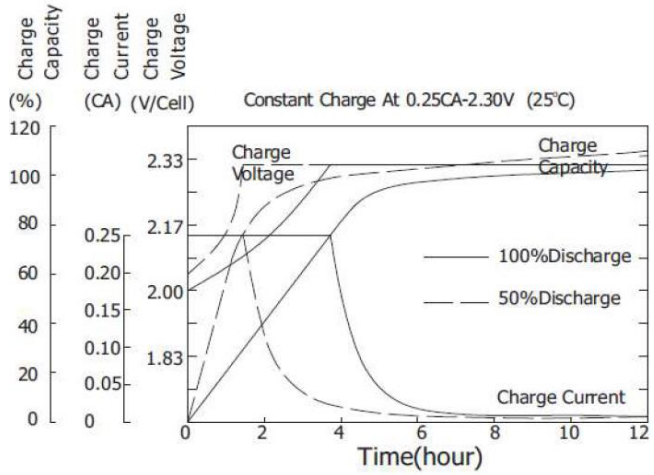
AccuForce 12V - 140Ah S

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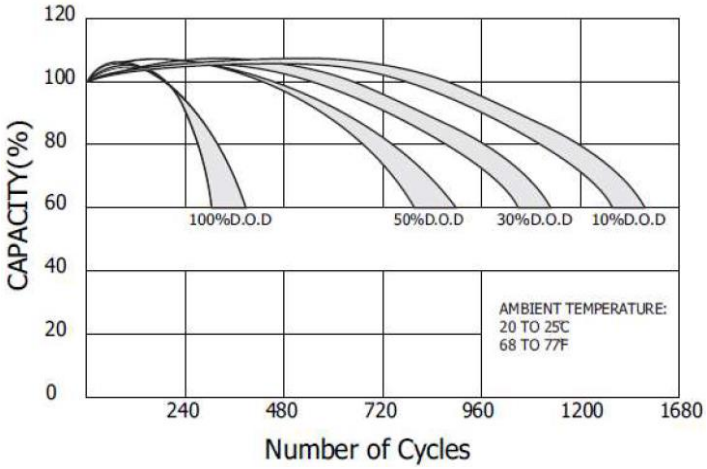
Discharge Characteristics (25°C)



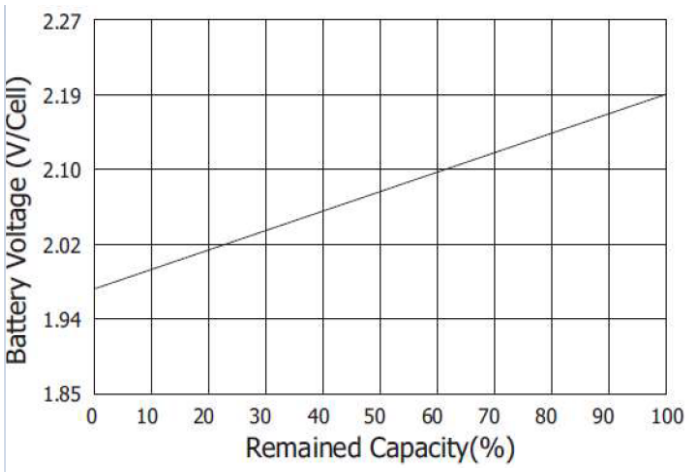
Charging Characteristics (25°C)



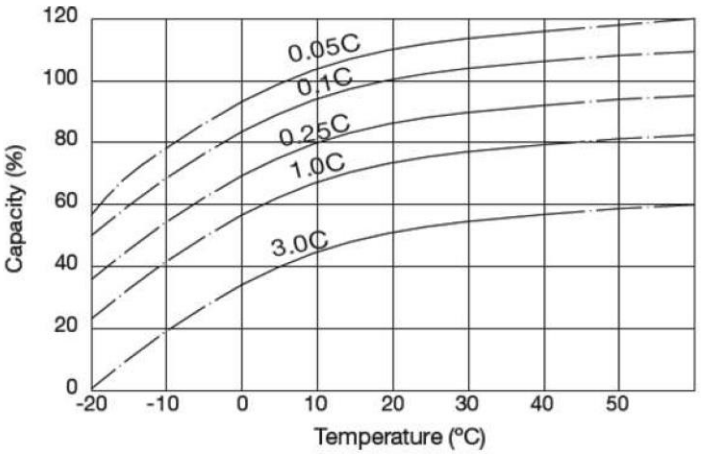
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (25°C)



Temperature Effects on Capacity



Self Discharge characteristics

