

- Unique European energy storage technology
- Fully certified
- Specially designed to use for all solar applications even in extreme temperature conditions
- Super long life time, leakage and maintenance free Terminals at the front for easy connection
- Durable and sustainable with extra long cycles



## SPECIFICATION

Cells Per Unit	6
Voltage Per Unit	12
Capacity	80Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx. 24 Kg
Max. Discharge Current	400 A(5 sec)
Internal Resistance	Approx. 5.5 mΩ
Operating Temperature Range	Discharge: -20°C ~ 60°C Charge: 0°C ~ 50°C Storage: -20°C ~ 60°C
Normal Operating Temperature Range	25°C ± 5°C
Float Charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	24 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C
Self Discharge	Hollandia batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For higher temperature, the time interval will be shorter.
Terminal	Faston F5/F11
Container Material	A.B.S. (UL94-HB) Flammability resistance of UL94-V1 can be available upon request.

### Constant Current Discharge Characteristics Unit: A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	299	214	156	92	52.0	31.9	20.9	17.3	13.6	9.8	8.3	4.4
1.67V	291	204	153	90	51.8	31.7	20.8	17.2	13.5	9.8	8.2	4.3
1.70V	274	197	150	90	51.3	31.4	20.6	17.1	13.4	9.7	8.2	4.2
1.75V	246	182	143	87	50.8	31.2	20.6	17.0	13.3	9.6	8.1	4.2
1.80V	222	166	132	84	49.6	30.6	20.0	16.6	13.0	9.4	8.0	4.1
1.85V	194	148	118	78	47.1	29.3	19.1	15.8	12.5	9.0	7.8	3.8

### Constant Power Discharge Characteristics Unit:W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	536	392	289	173	99.1	61.2	40.2	33.3	26.2	19.0	15.6	8.2
1.67V	525	375	283	171	98.6	61.0	40.1	33.2	26.1	19.0	15.4	8.2
1.70V	496	362	279	169	97.9	60.4	39.8	33.0	26.0	18.8	15.4	8.1
1.75V	447	335	266	165	97.0	59.8	39.6	32.8	25.8	18.6	15.2	8.0
1.80V	402	304	244	158	94.6	59.0	38.6	31.9	25.4	18.2	15.0	7.9
1.85V	347	270	218	148	89.6	56.2	36.7	30.4	24.1	17.6	14.6	7.6

All mentioned values are average values

### Charging Procedures (12V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	14.7	14.4 ~ 15.0	0.3C
Standby	25°C	13.7	13.6 ~ 13.8	0.3C

Charge the batteries at least once every six months, if they are stored at 25°C

Constant Voltage	14.4~15.0V, 5~11h, Max. Current 0.1CA
Constant Current	0.1CA×5h
Fast	0.3CA×1.7h

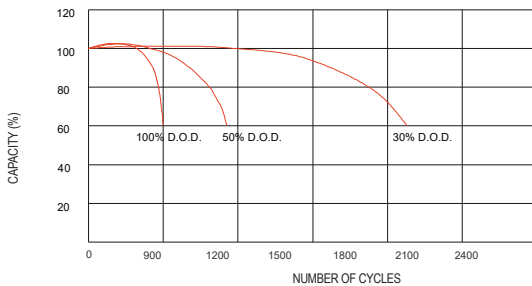
### Discharge Current vs. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

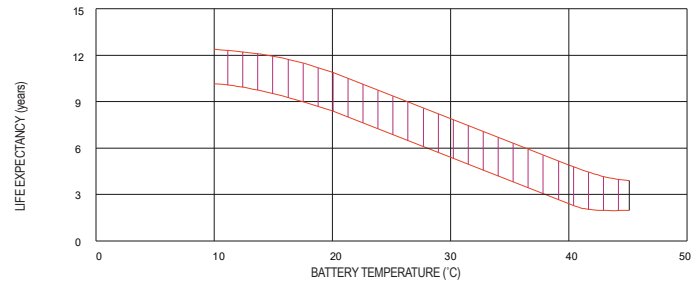
### Charging Procedures (6V series)

Application	Charge Voltage (V)			Max Current Charge
	Temperature	Set point	Allowable range	
Cycle Use	25°C	7.35	7.25 ~ 7.45	0.3C
Standby	25°C	6.85	6.8 ~ 6.9	0.3C

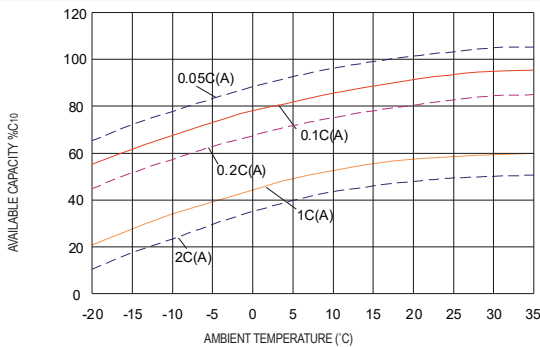
### LIFE CHARACTERISTICS OF CYCLIC USE



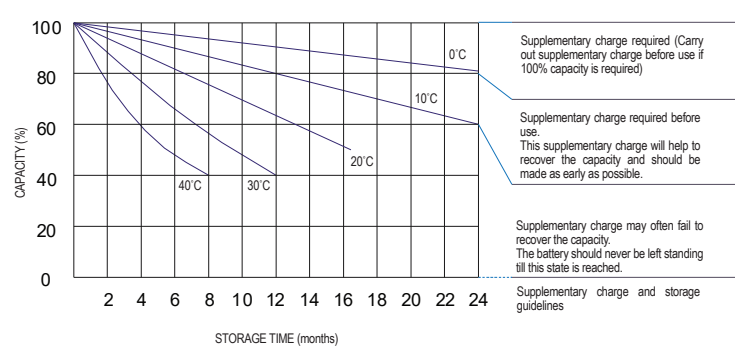
### EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE



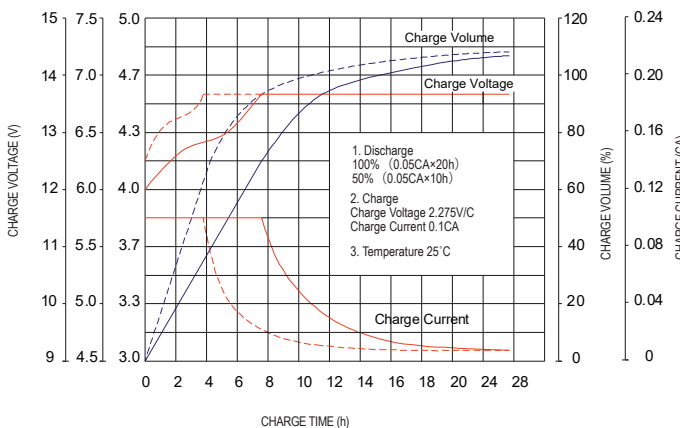
### TEMPERATURE EFFECTS CURVE



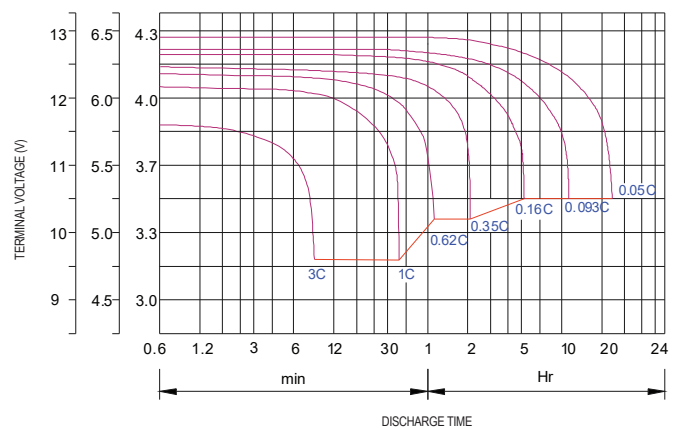
### STORAGE CHARACTERISTIC



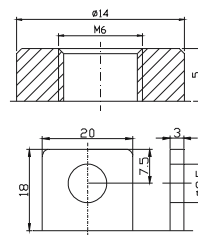
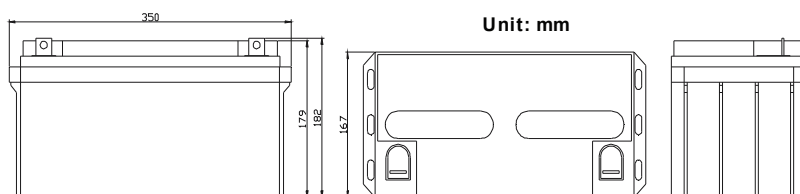
### CHARGE CHARACTERISTIC CURVE FOR STANDBY USE



### DISCHARGE CHARACTERISTIC CURVE



### DIMENSIONS



OUR PARTNER:



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