

Qoltec®

Product name: Gel Battery

Trade name: Gel battery | 12V | 150Ah

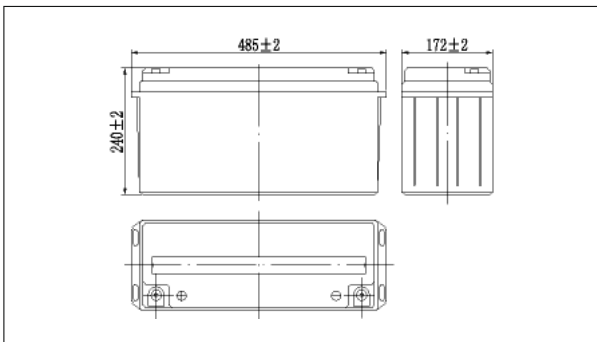
Model: 53082

Specifications

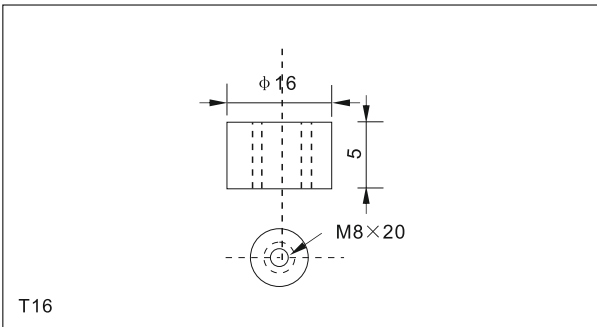
Nominal Voltage		12V
Rated capacity (10 hour rate)		150Ah
Dimensions	Length	485±2mm(19.09inch)
	Width	172±2mm(6.77inch)
	Height	240±2mm(9.45inch)
	Total Height	240±2mm(9.45inch)
Approx. Weight		41.8kg(92.1lbs)±3%



Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	10HR(10.8V)	150Ah
	3HR(10.8V)	140Ah
	1HR(10.5V)	85Ah
Terminal type		T16
Internal resistance (Fully charged, 25°C)		Approx.4.3m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	Remaining Capacity:65%
Nominal operating temperature		25°C ±3°C(77°F ±5°F)
Operating temperature range	Discharge	-15°C~50°C(5°F~122°F)
	Charge	-10°C~50°C(14°F~122°F)
	Storage	-20°C~50°C(-4°F~122°F)
Float charging voltage(25°C)	13.50 to 13.80V	Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)	14.40 to 14.70V	Temperature compensation: -30mV/°C
Maximum charging current	30A	
Maximum discharge current	1200A(5 sec.)	
Designed floating life(20°C)	12 years	

Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Gel	Rubber	Copper

Constant Current Discharge Characteristics Unit:A(25°C,77°F)

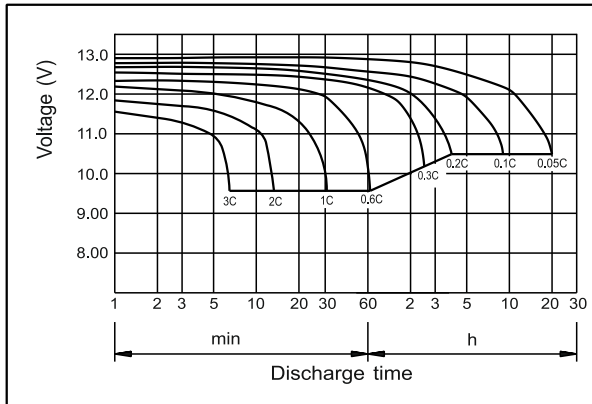
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	277	227	138	85.2	51.9	36.9	29.0	24.6	17.4	14.5	7.66
9.90V	269	222	135	83.9	51.6	36.7	28.8	24.5	17.3	14.4	7.65
10.2V	258	214	131	81.8	51.1	36.5	28.6	24.3	17.2	14.4	7.62
10.5V	246	206	128	79.2	50.4	36.2	28.4	24.1	17.0	14.3	7.58
10.8V	233	195	123	76.7	49.1	35.5	27.5	23.4	16.5	14.2	7.53

Constant Power Discharge Characteristics Unit:A(25°C,77°F)

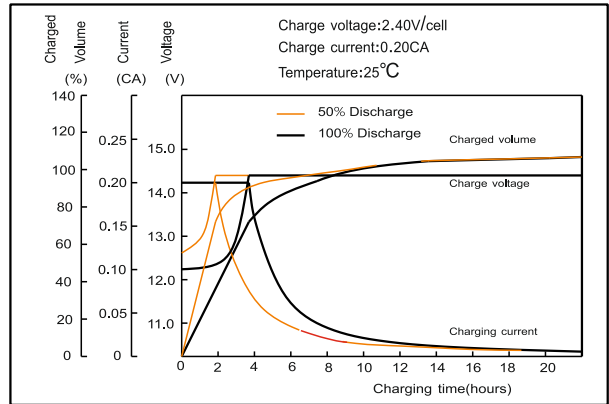
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2991	2495	1545	971	601	434	341	291	206	173	91.9
9.90V	2901	2435	1515	957	597	432	339	289	205	172	91.8
10.2V	2781	2345	1468	932	592	429	336	287	204	172	91.5
10.5V	2662	2265	1433	903	583	426	334	285	202	171	90.9
10.8V	2512	2145	1380	874	568	417	324	277	196	170	90.3

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

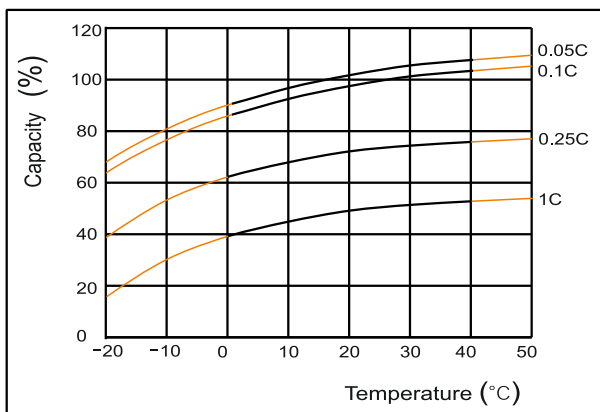
Discharge characteristics(25°C)



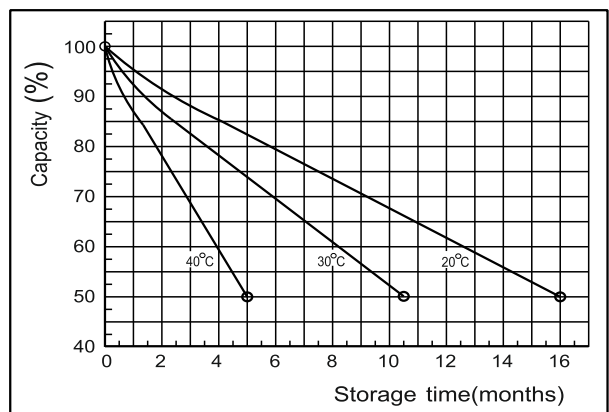
Charging characteristics (25°C)



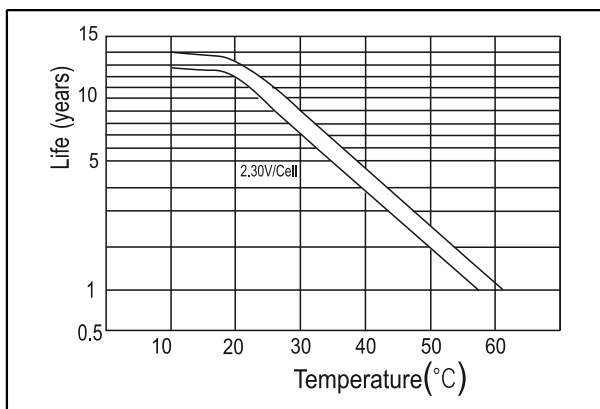
Temperature effects on Capacity



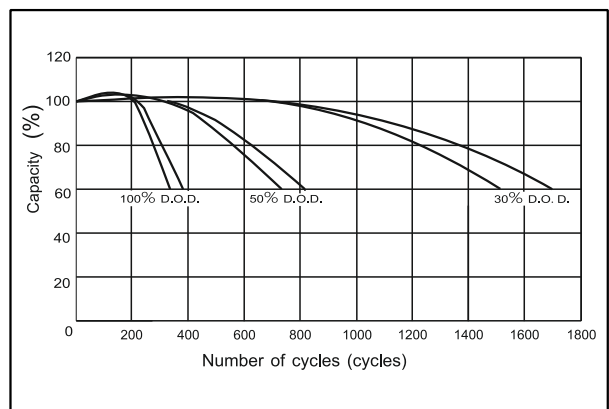
Self-discharge characteristics



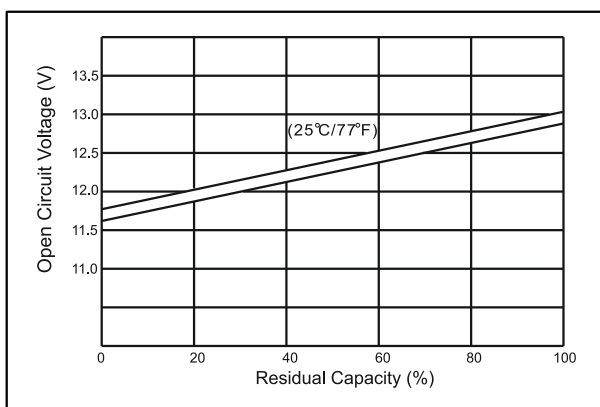
Floating life on Temperature



Cycle life on D.O.D (25°C)



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

