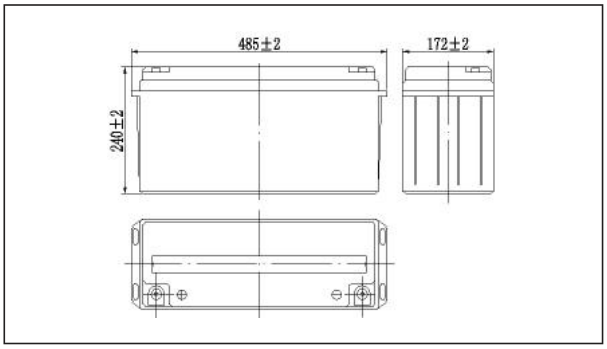
TYD12-150 12V150Ah



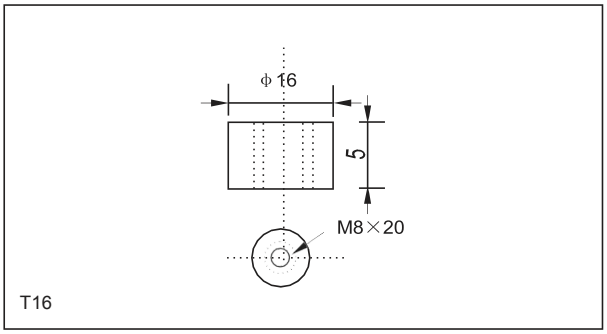
Specifications

Nominal Voltage		12V
Rated capacity (20 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		41.5kg(91.3lbs)±3%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25℃)	20HR(10.8V)	150Ah
	10HR(10.8V)	140Ah
	1HR(10.5V)	82Ah
Terminal type		T16
Internal resistance (Fully charged,25℃)		Approx.3.5m Ω
Capacity affected by temperature (10HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	Remaining Capacity:65%
Nominal operating temperature		25℃ ±3℃(77℉±5℉)
Operating temperature range	Discharge	-15~40°C (Ideal: 20~25°C)
	Charge	-10~40°C (Ideal: 20~25°C)
	Storage	-20℃~40℃
Float charging voltage(25℃)		13.50 to 13.80V Temperature compensation: -18mV/℃
Cyclical voltage(25℃)		14.40 to 14.80V Temperature compensation: -30mV/℃
Maximum charging current		45A
Maximum discharge current		1135A(5 sec.)
Designed floating life(20℃)		10years

Construction

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

Constant Current Discharge Characteristics Unit:A(25℃,77℉)

F.V/Time	10m i n	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	317	244	146	89.9	53.1	38.2	30.6	26.1	17.9	14.8	7.84
9.90V	308	239	143	88.5	52.8	38.1	30.4	26.0	17.8	14.7	7.83
10.2V	295	229	139	86.3	52.3	37.8	30.1	25.8	17.7	14.7	7.81
10.5V	282	222	135	83.5	51.5	37.5	29.9	25.6	17.6	14.6	7.76
10.8V	266	210	130	80.9	50.2	36.3	29.1	24.8	17.1	14.5	7.70

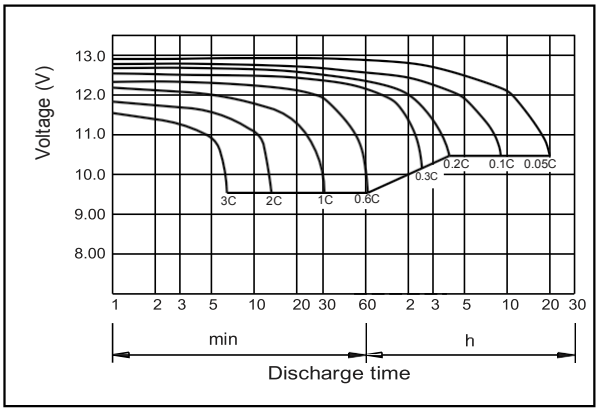
Constant Power Discharge Characteristics Unit:A(25℃,77℉)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	3423	2710	1640	1024	615	450	360	309	213	177	94.1
9.90V	3320	2618	1607	1009	611	447	357	307	211	177	93.9
10.2V	3183	2520	1558	984	606	445	355	305	210	176	93.6
10.5V	3046	2435	1520	953	597	441	352	302	209	175	93.1
10.8V	2875	2306	1464	921	582	428	342	394	203	174	92.4

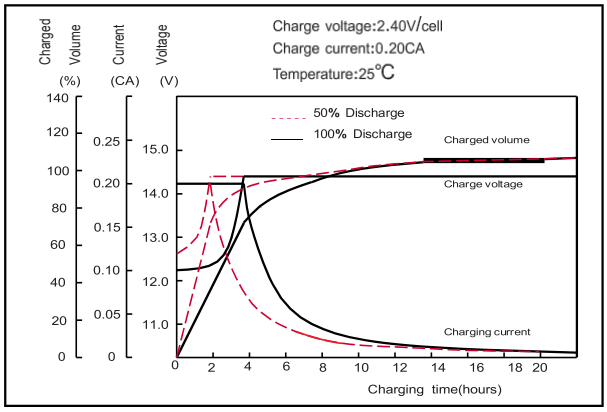
Note: The above characteristics data can be obtained within three charge or discharge cycles.

TYD12-150Ah 12V150Ah

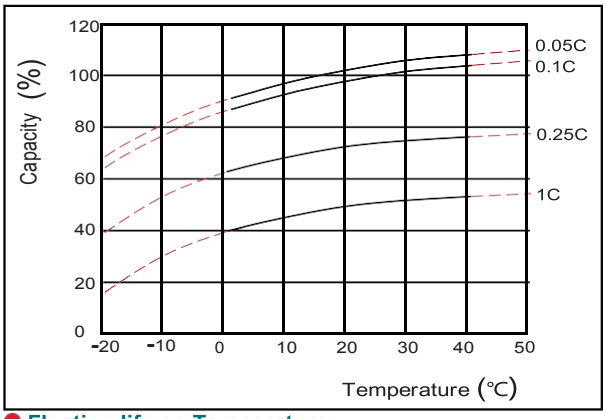
Discharge characteristics(25°C)



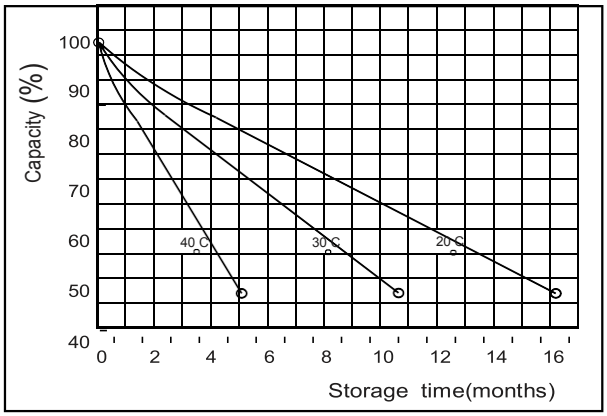
Charging characteristics (25°C)



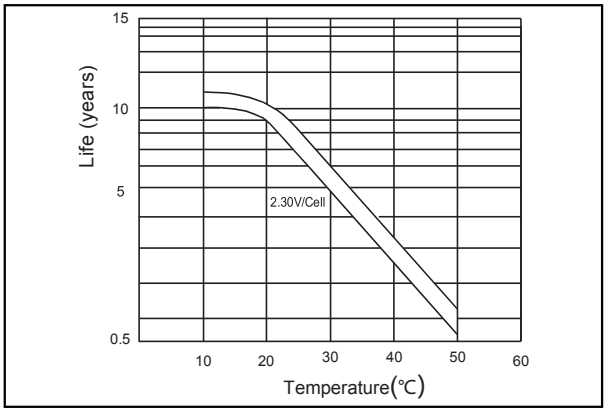
Temperature effects on Capacity



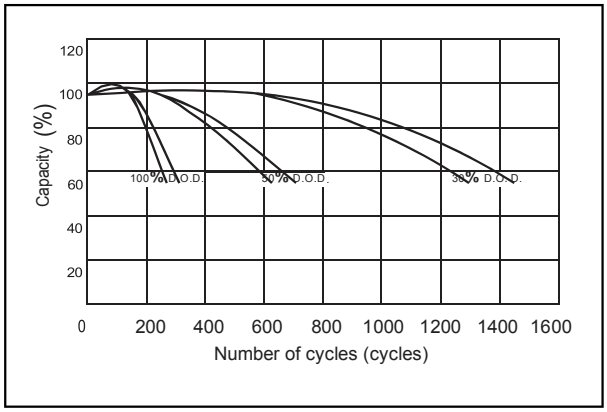
Self-discharge characteristics



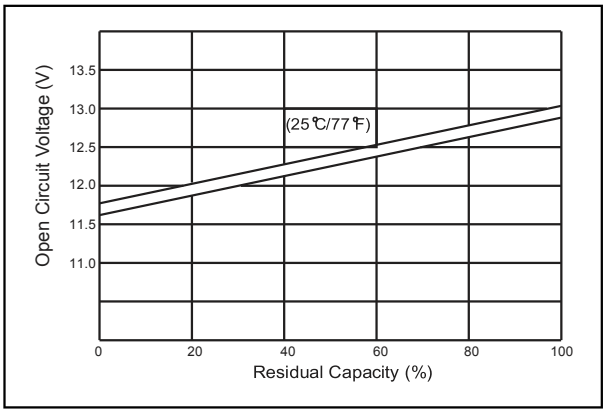
Floating life on Temperature



Cycle life on D.O.D (25℃)



The relationship for OCV and Capacity (25℃)



The relationship for Charging voltage and Temperature

