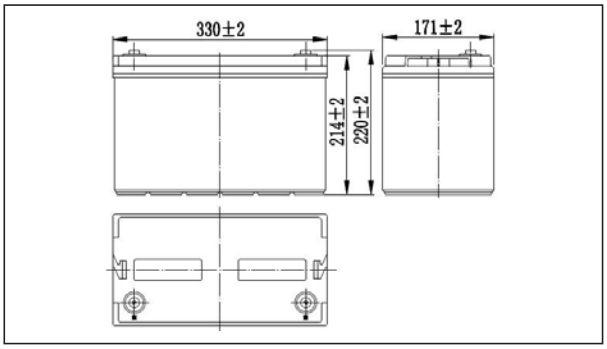
TYD12-100Ah 12V100Ah



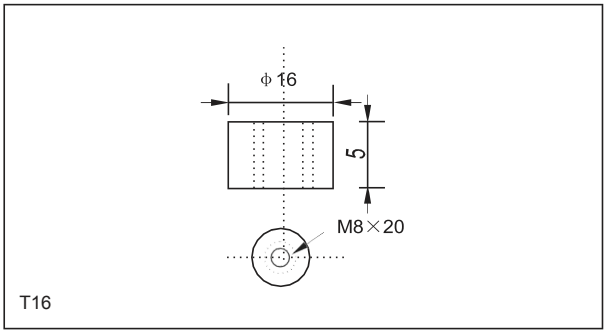
Specifications

Nominal Voltage		12V
Rated capacity (20 hour rate)		100Ah
Dimensions	Length	330±2mm(12.99inch)
	Width	171±2mm(6.73inch)
	Height	214±2mm(8.43inch)
	Total Height	220±2mm(8.66inch)
Approx. Weight		28.5kg(62.7lbs)±3%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25℃)	20HR(10.8V)	100Ah
	10HR(10.8V)	93Ah
	1HR(10.5V)	53Ah
Terminal type		T16
Internal resistance (Fully charged,25℃)		Approx.4.5m 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		30A
Maximum discharge current		755A(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	210	161	97	59.5	35.2	25.3	20.2	17.3	11.9	9.8	5.20
9.90V	204	158	95	58.6	35.1	25.2	20.1	17.2	11.8	9.8	5.18
10.2V	195	152	92	57.1	34.6	25.1	20.0	17.1	11.7	9.7	5.17
10.5V	187	147	90	55.3	34.2	24.8	19.8	17.0	11.6	9.7	5.14
10.8V	177	139	86.4	53.5	33.3	24.1	19.3	16.4	11.3	9.6	5.11

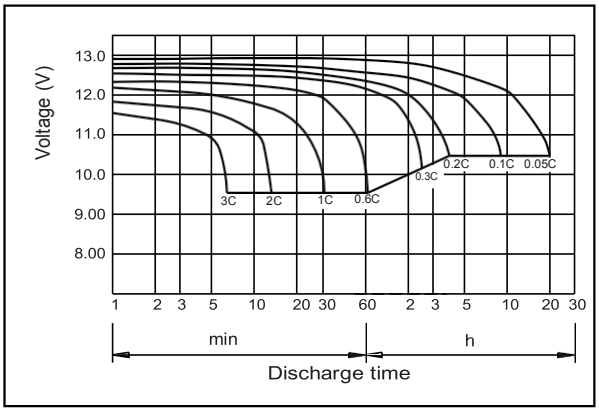
Constant Power Discharge Characteristics Unit:W(25℃,77℉)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2267	1777	1086	679	408	298	238	204	142	117	62.3
9.90V	2199	1733	1064	668	405	296	237	203	141	117	62.2
10.2V	2108	1670	1032	651	402	295	235	202	140	116	62.0
10.5V	2107	1612	1006	631	396	292	233	200	139	116	61.6
10.8V	1989	1527	969	611	385	283	227	194	134	115	61.3

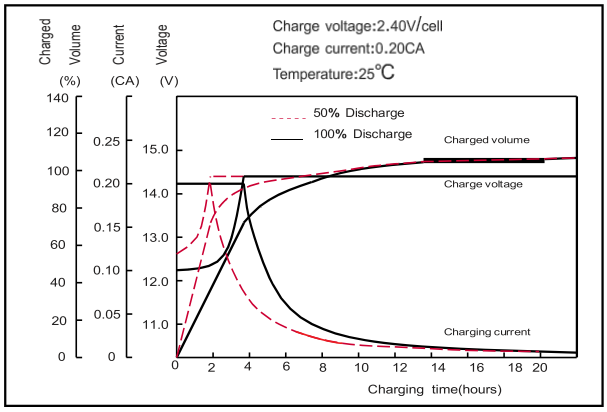
Note: The above characteristics data can be obtained within three charge or discharge cycles.

TYD12-100Ah 12V100Ah

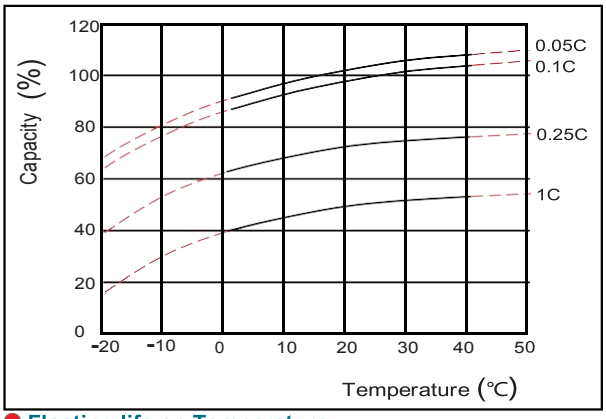
Discharge characteristics(25°C)



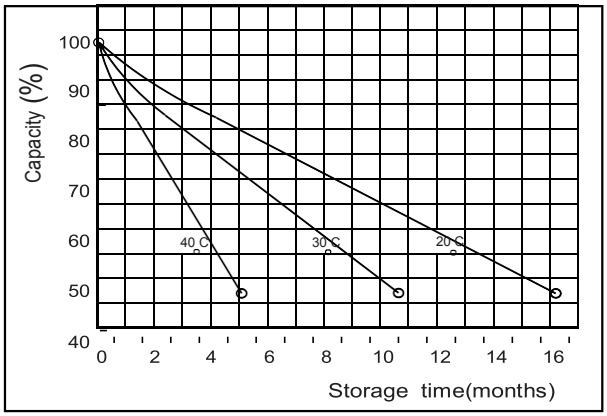
Charging characteristics (25°C)



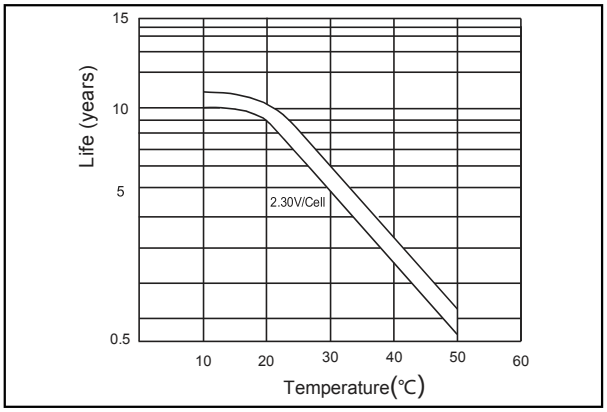
Temperature effects on Capacity



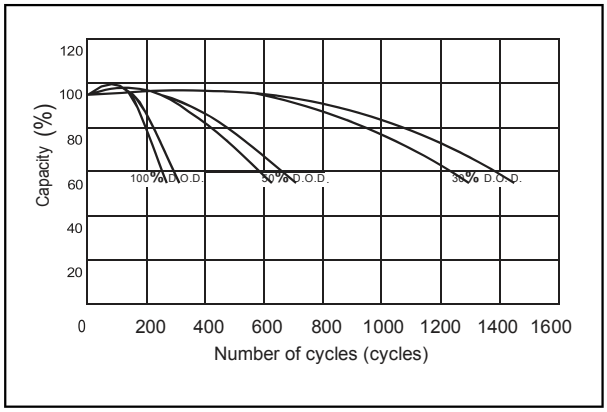
Self-discharge characteristics



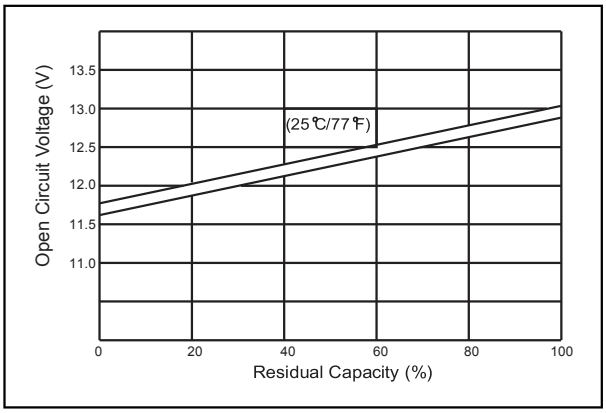
Floating life on Temperature



Cycle life on D.O.D (25℃)



The relationship for OCV and Capacity (25℃)



The relationship for Charging voltage and Temperature

