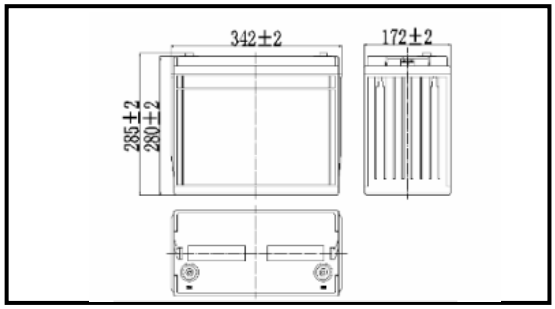
HR12475W (12V475 Watts/cell)

Valve Regulated Lead Acid Battery

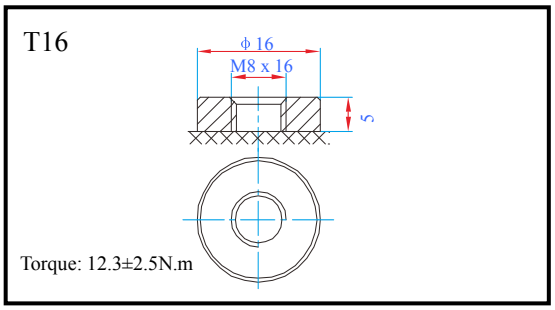
Specifications

Nominal voltage		12V (6 cells per unit)
Rated capacity (15min. rate)		475 Watts/cell /1.67V
Dimensions	Length	342±2mm (13.46inch)
	Width	172±2mm (6.77inch)
	Height	280±2mm (11.02inch)
	Total height	285±2mm (11.20inch)
Approx. weight		44.00kg (97.00lbs)±3%

Outer dimensions (mm)



Terminal type (mm)



Characteristics

Capacity (25°C)	15min. rate	475 Watts/cell /1.67V
	10HR	135Ah/10.8V
Terminal type		T16
Internal resistance (Fully charged, 25°C)		Approx. 3.8mΩ
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/Block
Cyclic charging voltage (25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C/Block
Maximum charging current		38A
Maximum discharge current		1050A (5 sec.)
Design life	10 years for floating (25°C)	
	Eurobat (20°C): 10-12 years, long life.	

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: Ampere/cell (at 25°C, 77°F)

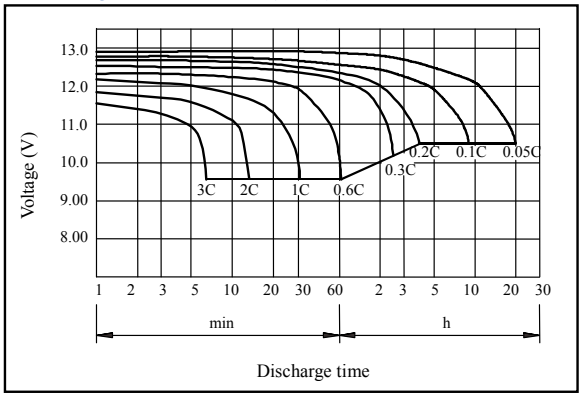
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	335.17	261.67	215.34	163.24	115.73	87.50	50.10	35.90	28.90	25.20	21.50
1.67V/cell	320.04	253.43	206.86	157.57	112.49	85.30	49.60	35.60	28.70	24.90	21.30
1.70V/cell	308.14	246.22	202.61	155.30	110.32	84.00	49.30	35.50	28.60	24.80	21.20
1.75V/cell	298.41	237.98	196.25	150.77	107.51	82.30	48.60	35.20	28.40	24.70	21.10
1.80V/cell	282.19	224.58	185.64	146.23	103.62	79.80	47.30	34.20	27.50	23.90	20.50

Constant power discharge characteristics unit: Watt/cell (at 25°C, 77°F)

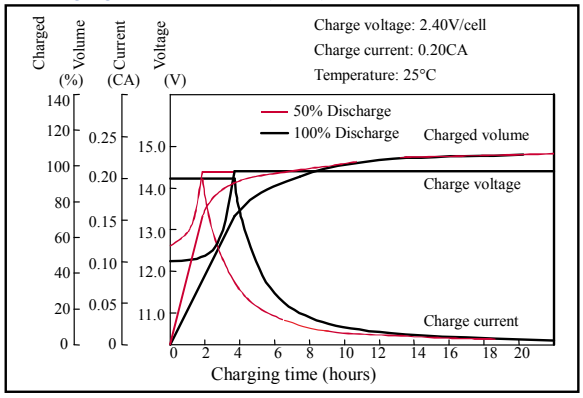
F.V/Time	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	637.38	499.80	415.87	309.36	228.22	169.00	97.60	70.70	57.00	49.80	42.60
1.67V/cell	607.91	475.00	398.90	299.34	220.50	165.00	96.80	70.10	56.50	49.40	42.20
1.70V/cell	592.63	470.22	391.47	293.78	217.19	162.00	96.20	69.80	56.30	49.20	42.10
1.75V/cell	566.44	453.90	377.68	287.10	211.68	159.00	94.70	69.40	55.90	48.80	41.80
1.80V/cell	534.79	430.44	357.52	275.97	203.96	154.00	92.30	67.30	54.20	47.40	40.50

Note 1: Above characteristics data can be obtained within three charge and discharge cycles.

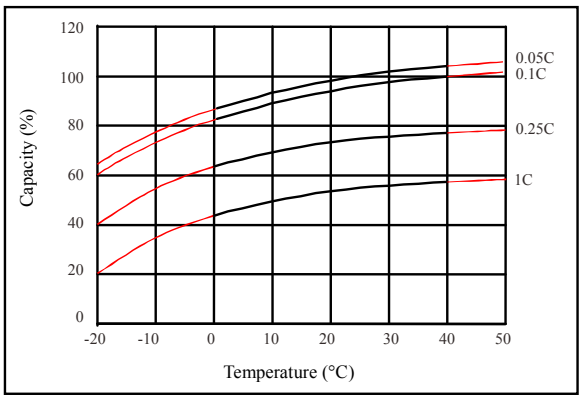
Discharge characteristics (25°C)



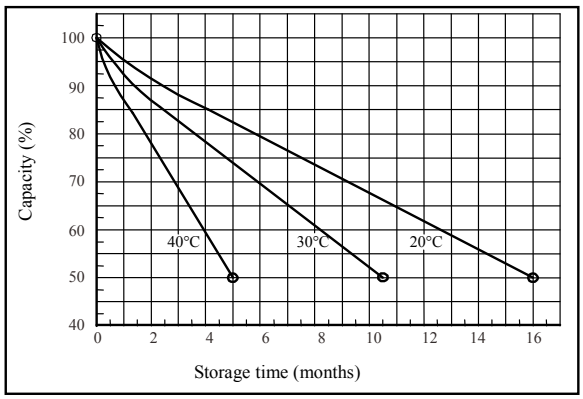
Charging characteristics (25°C)



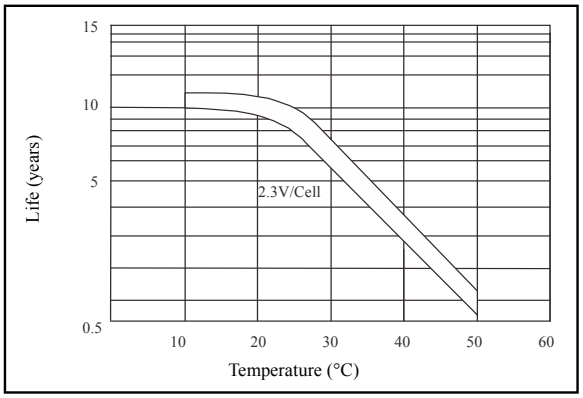
Temperature effects on capacity



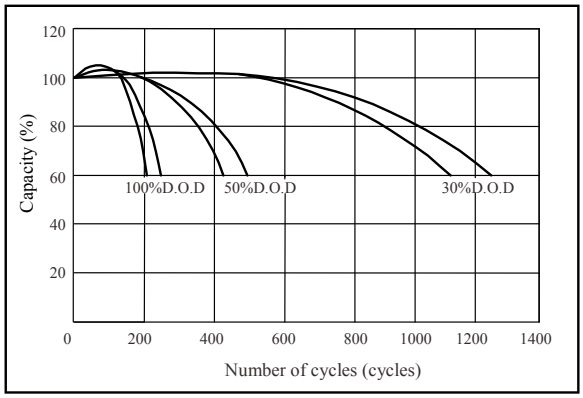
Self-discharge characteristics



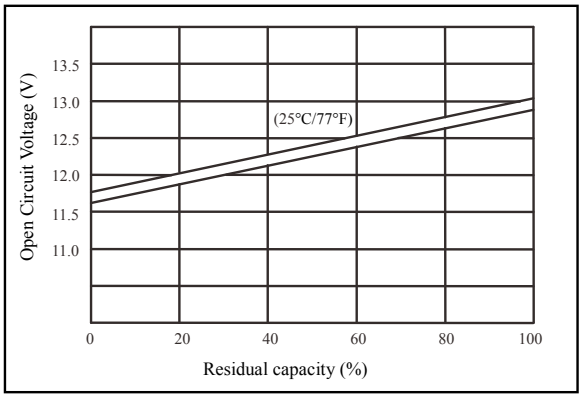
Floating life on temperature



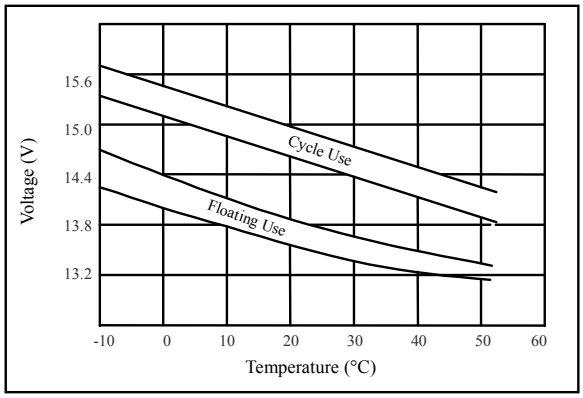
Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Relationship for charging voltage and temperature



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