



# AGM-12-28

Valve-regulated lead-acid battery



# GENERAL PURPOSE SERIES

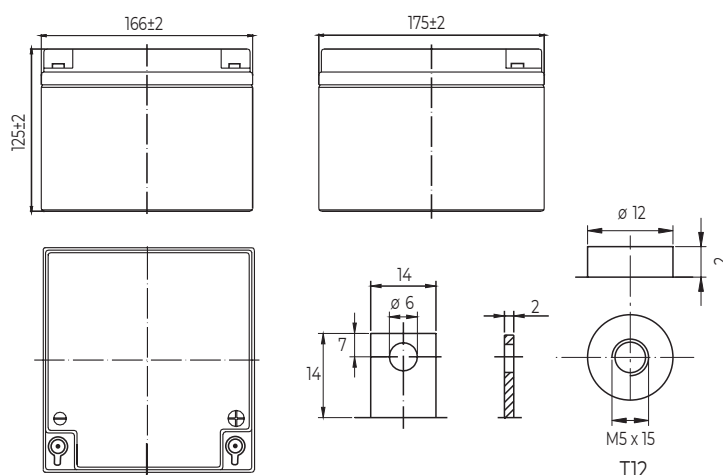
## Characteristics

Nominal voltage	12V (6 cells per unit)	
Nominal capacity at 20 hours rate/10.5V (25°C)	28Ah	
Capacity (25°C)	10 Hours rate/10.5V	24.3Ah
	5 Hours rate/10.5V	22.2Ah
Terminal type	T12/T4	
Torque	3.0±0.6N.m	
Approx. internal resistance (25°C)	12 mΩ	
Dimensions	Length	166±2mm (6.54inch)
	Width	175±2mm (6.89inch)
	Height	125±2mm (4.92inch)
	Total height	125±2mm (4.92inch)
Design Life (stand-by)	JIS at 25°C	5 years
	Eurobat at 20°C	3-5 years
Weight	8.20kg (17.40lbs)±4%	
Nominal operating temperature	25°C±3 (77±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 at 25°C	13.6V~13.8V	
Cyclic charging voltage at 25°C	14.5V~15.0V	
Temperature compensation	Float charge	-18 mV/°C/Block
	Cycle charge	-30 mV/°C/Block
Max. charging current (A)	7.8A	
Max. discharge current for 5 seconds	360A	
Self discharge rate (25°C)	≤3%/month	
Battery container ABS UL94-HB	V-0 optional	

## Overview

General Purpose series batteries are de-signed with state-of-the-art AGM (absorbent glass mat) technology, high-performance plates and electrolyte. With excellent value and characteristics, this range is suitable for all general purpose applications.

## Dimensions & Terminal Type (mm)



## Construction

Component	Positive Plate	Negative plate	Container	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS (V-0 opt.)	AGM	Sulfuric Acid	Rubber	Copper

## Constant current discharge characteristics at 25°C

(Ampere/battery)

F.V/Time	5min	10min	15min	30min	60min	2hr	3hr	4hr	5hr	10hr	20hr
9.60V	102	64.2	50.2	28.2	17.4	9.32	6.44	5.33	4.53	2.46	1.32
9.90V	99	62.2	48.9	27.7	17.1	9.26	6.41	5.30	4.51	2.45	1.31
10.2V	95	59.6	47.2	26.9	16.7	9.18	6.36	5.26	4.48	2.44	1.31
10.5V	91	57.1	45.5	26.3	16.4	9.04	6.32	5.23	4.45	2.43	1.30
10.8V	86	53.9	43.2	25.2	15.9	8.81	6.13	5.07	4.31	2.38	1.27

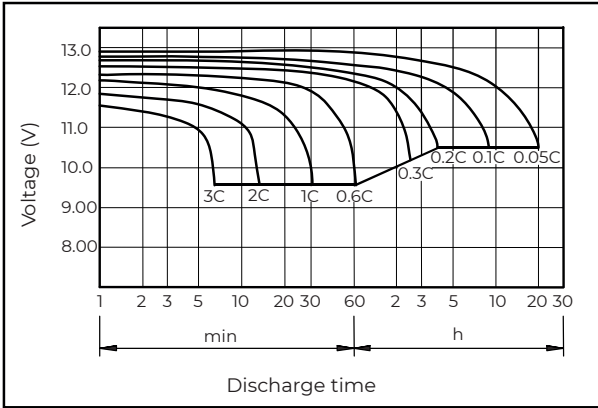
## Constant power discharge characteristics at 25°C

(Watts/battery)

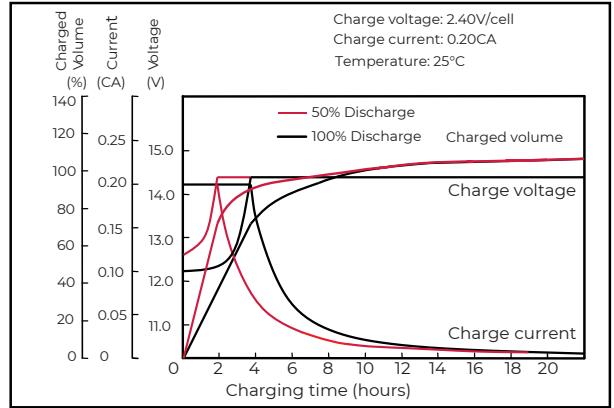
F.V/Time	5min	10min	15min	30min	60min	2hr	3hr	4hr	5hr	10hr	20hr
9.60V	1130	724	571	324	201	114	76.6	63.5	54.1	29.5	15.8
9.90V	1097	702	538	318	198	113	76.1	63.1	53.8	29.4	15.8
10.2V	1051	673	537	307	194	112	75.6	62.7	53.5	29.3	15.7
10.5V	1006	644	518	300	190	111	75.1	62.2	53.1	29.1	15.6
10.8V	949	608	491	290	184	108	72.8	60.4	51.5	28.5	15.3

The above characteristics represent average values and can be obtained within three charge and discharge cycles. The batteries must be fully charged before testing. The data in this document is subject to change without notice and become contractual only after written confirmation. Please contact Conexpro for the latest available version.

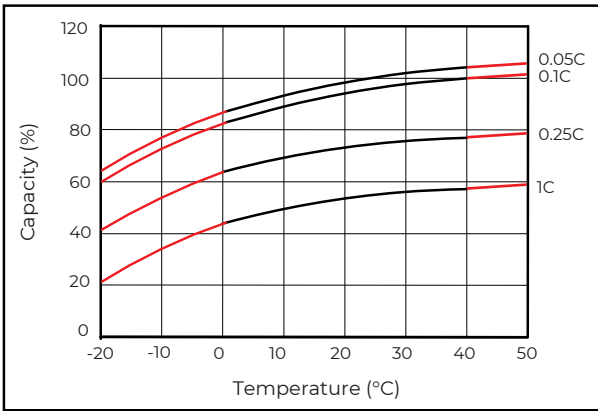
**Discharge characteristics (25°C)**



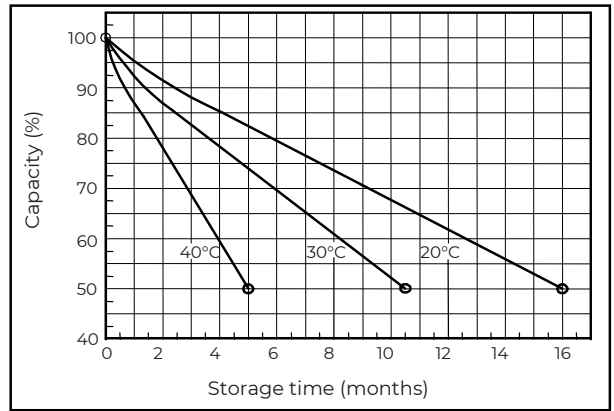
**Charging characteristics (25°C)**



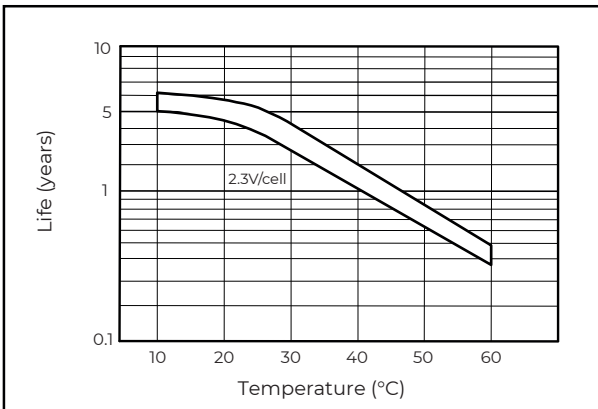
**Temperature effects on capacity**



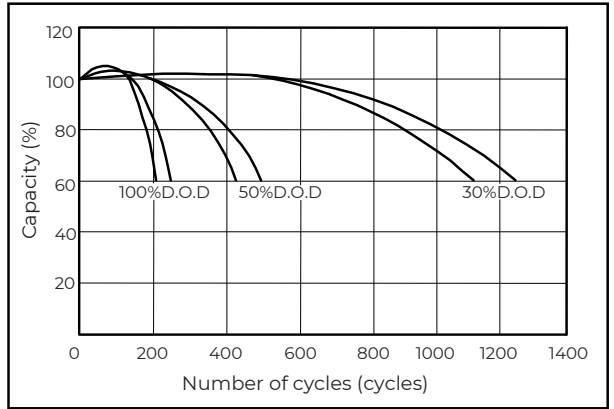
**Self-discharge characteristics**



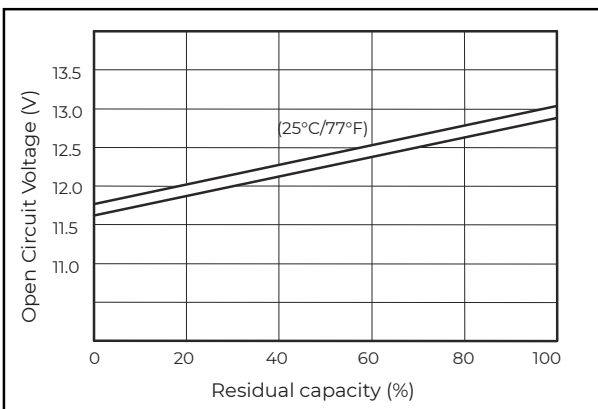
**Floating life on temperature**



**Cycle life on D.O.D (25°C)**



**Relationship for OCV and capacity (25°C)**



**Charging voltage VS temperature**

