

GEL-12-150

Valve-regulated lead-acid battery



GEL SERIES

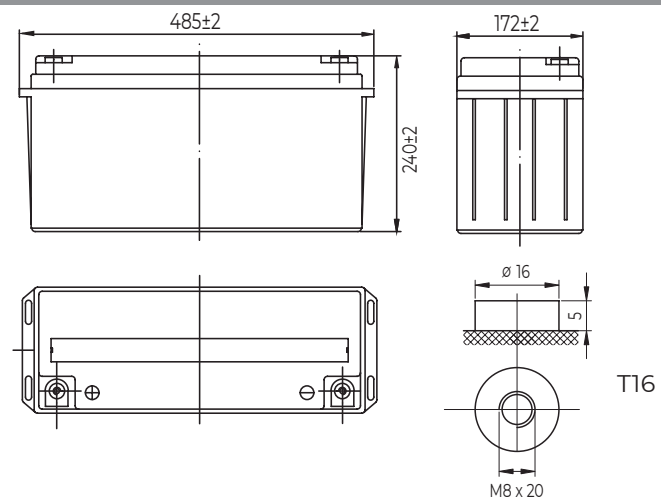
Characteristics

Nominal voltage	12V (6 cell per unit)	
Nominal capacity at 20 hours rate/10.8V (25°C)	150Ah	
Capacity (25°C)	10 Hours rate/10.8V	133Ah
	5 Hours rate/10.8V	109.5Ah
Terminal type	T16	
Torque	12.3±2.5N.m	
Approx. internal resistance (25°C)	4.3 mΩ	
Dimensions	Length	485±2mm (19.09inch)
	Width	172±2mm (6.77inch)
	Height	240±2mm (9.45inch)
	Total height	240±2mm (9.45inch)
Design Life (stand-by)	JIS at 25°C	12 years
	Eurobat at 20°C	10/12 years
Weight	41.50kg (98.10lbs)±3%	
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	13.5V~13.8V	
Cyclic charging voltage at 25°C	14.5V~14.7V	
Temperature compensation	Float charge	-18 mV/°C/Block
	Cycle charge	-30 mV/°C/Block
Max. charging current (A)	30A	
Max. discharge current for 5 seconds	1200A	
Self discharge rate (25°C)	≤3%/month	
Battery container ABS UL94-HB	V-0 optional	

Overview

GEL Series are manufactured following the highest demands in the deep cycle and renew-able energy applications. The batteries use colloidal or foamed silica gel to immobilize the electrolyte, which further enhances the cycling stability. Available in top and front terminal types.

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 Gel	Rubber	Copper

Constant current discharge characteristics at 25°C

(Ampere/battery)

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	260	213	129	80.0	48.7	34.6	27.2	23.1	16.3	13.6	7.53
9.90V	252	208	126	78.8	48.5	34.4	27.0	23.0	16.2	13.5	7.52
10.2V	242	201	123	76.8	48.0	34.3	26.8	22.8	16.1	13.5	7.52
10.5V	231	193	120	74.4	47.3	34.0	26.6	22.6	15.9	13.4	7.51
10.8V	219	183	115	72.0	46.1	33.3	25.8	21.9	15.5	13.3	7.50

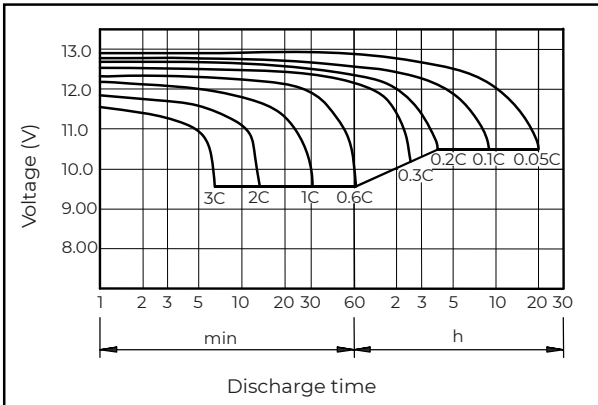
Constant power discharge characteristics at 25°C

(Watts/battery)

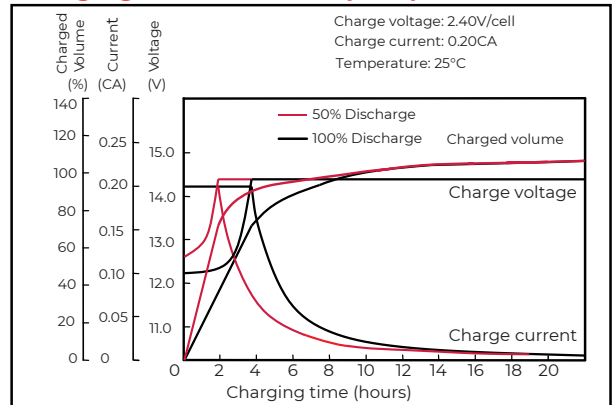
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	2811	2345	1452	912	564	407	320	273	193	162	90.3
9.90V	2726	2288	1424	899	561	406	318	271	192	161	90.2
10.2V	2614	2204	1379	876	556	403	315	269	191	161	90.2
10.5V	2502	2129	1347	848	548	400	313	267	189	160	90.1
10.8V	2361	2016	1297	821	533	391	304	260	184	159	90.0

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.

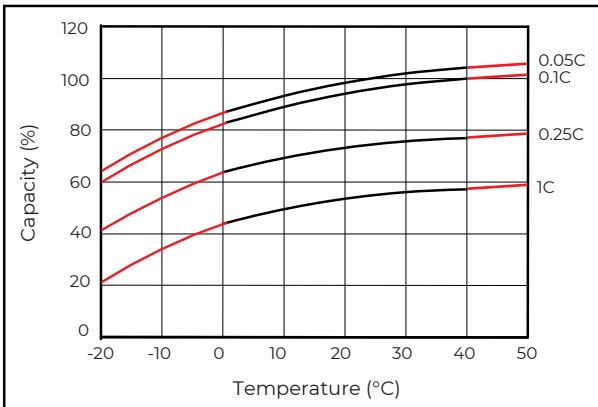
Discharge characteristics (25°C)



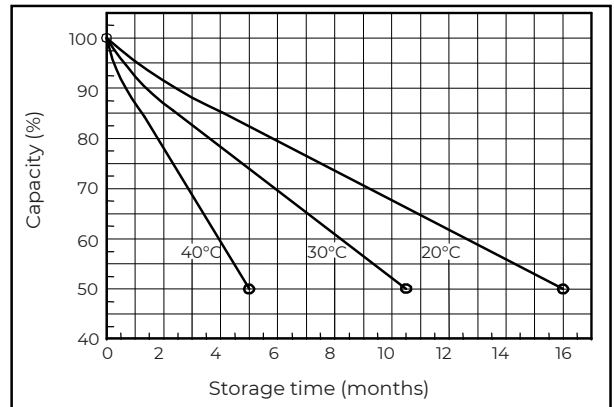
Charging characteristics (25°C)



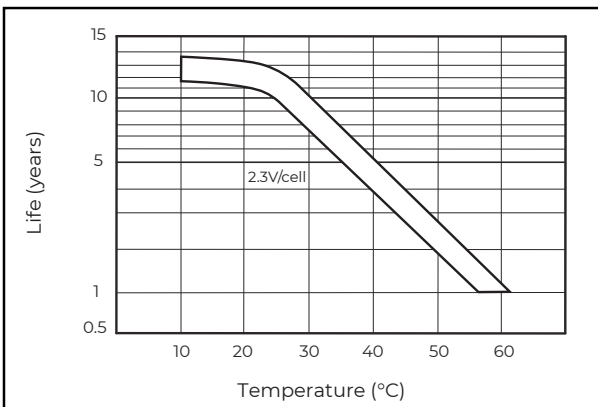
Temperature effects on capacity



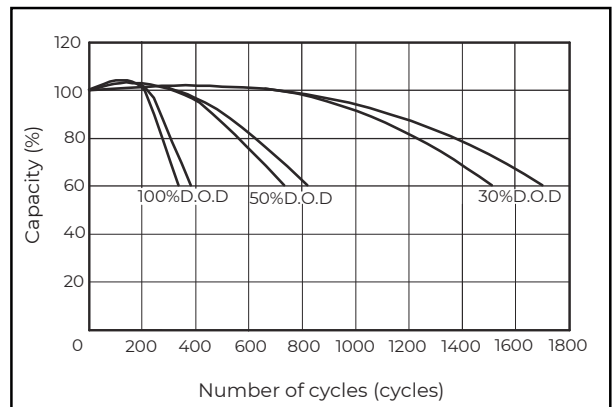
Self-discharge characteristics



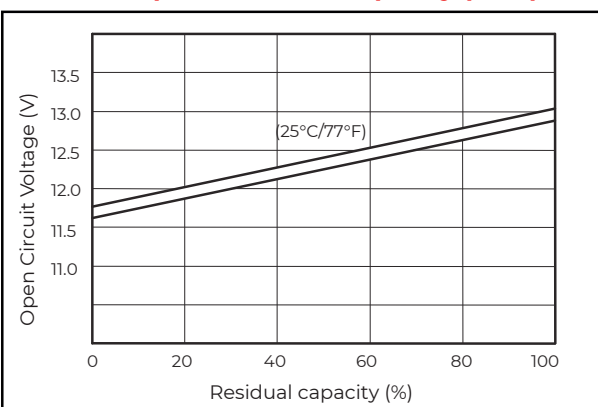
Floating life on temperature



Cycle life on D.O.D (25°C)



Relationship for OCV and capacity (25°C)



Charging voltage VS temperature

