

GLPG 33-12

Maintenance free Lead Acid VRLA GEL Battery



■ Features:

- Made in VRLA technology (GEL)
- Designed for standby and cyclic use
- High Cycle Service Life, up to: 800 Cycles at 50% DOD
- Designed service life is 10 years (for 20°C)
- Designed to use in every equipment and vehicle with DC motor
- Compliance with standards: EN 60896-21; EN60896-22; EN 61056-1; EN 61056-2, PN-E 83016:1999

■ Application:

- DC power motor – cycle use
- Supply for portable equipment
- Uninterruptible Power Supply (UPS)

MECHANICAL SPECIFICATION

Dimensions	Length	196mm
	Width	131mm
Container material ABS (UL94-HB), optional UL94-V0	Height	161mm
	Total height	167mm
	Terminal	M6 Bolt
Weight		11kg

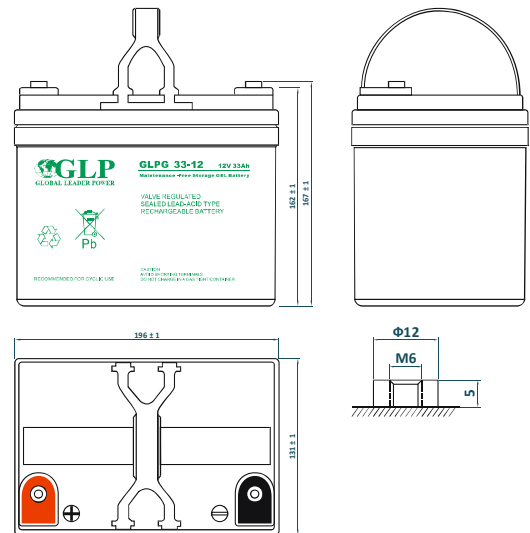
ELECTRICAL SPECIFICATION

Nominal Voltage	12V	
Capacity for 25°C and cut-off voltage 10.5V	20h	C _{NOM} = 33.6Ah
	5h	27.15Ah
	1h	18.4Ah
Internal Resistance	Fully charged battery at 25°C	≤ 7.4mΩ
Capacity Affected by Temp.	+20°C	100% C _{NOM}
	0°C	85% C _{NOM}
	-15°C	65% C _{NOM}
Self Discharge	3 months	91% C _{NOM}
	6 months	82% C _{NOM}
	12 months	64% C _{NOM}
Charge – standby use	Voltage	13.5 ÷ 13.8VDC
	Temp compensation	-20mV/°C
Charge – cycle use	Voltage	14.4 ÷ 15VDC
	Temp compensation	-30mV/°C
Charge Current (max.)	9A	
Discharge Current (max.)	300A (5 sec)	

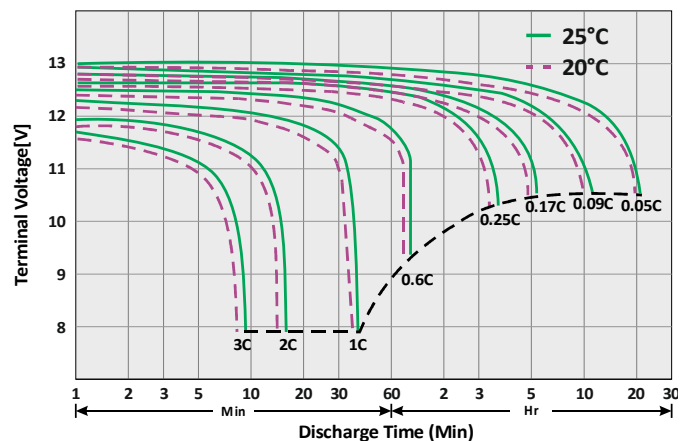
OTHERS

Working Temp	Discharging	-20°C ÷ +50°C
	Charging	-10°C ÷ +50°C
	Storage	-20°C ÷ +50°C

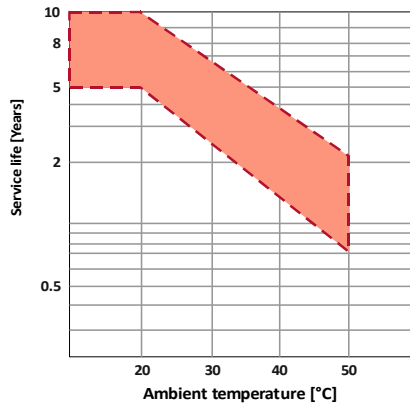
DIMENSIONS



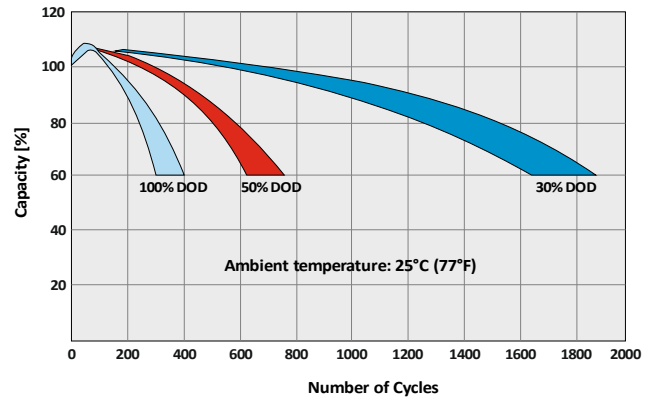
DISCHARGE CURVE



Standby Use Service Life Curve



Cycle Service Life Curve



Constant Current Discharge [A, 25°C]												
Time	5 min	10 min	15 min	30 min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	10 Hr	20 Hr
Cut-off Voltage												
1.85 V/cell	74.6	54.9	47.7	28.8	16.9	9.99	7.44	6.27	5.16	4.75	3.17	1.58
1.80 V/cell	77.4	57.0	49.5	29.9	17.7	10.41	7.77	6.53	5.38	4.95	3.30	1.67
1.75 V/cell	85.2	59.9	52.0	31.1	18.4	10.71	7.99	6.60	5.43	5.00	3.33	1.68
1.70 V/cell	95.2	62.7	54.4	32.6	18.7	10.91	8.14	6.66	5.48	5.05	3.37	1.68
1.65 V/cell	105.3	65.6	59.9	33.4	19.4	11.22	8.38	6.73	5.54	5.10	3.40	1.70

Constant Power Discharge [W, 25°C]												
Time	5 min	10 min	15 min	30 min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	10 Hr	20 Hr
Cut-off Voltage												
1.85 V/cell	141.7	104.4	90.6	54.7	32.2	19.0	14.13	11.92	9.81	9.03	6.02	3.01
1.80 V/cell	147.1	108.3	94.0	56.8	33.6	19.8	14.76	12.41	10.22	9.40	6.27	3.13
1.75 V/cell	161.8	113.8	98.8	59.0	34.9	20.4	15.17	12.54	10.32	9.50	6.33	3.17
1.70 V/cell	180.9	119.2	103.4	61.9	35.6	20.7	15.47	12.66	10.42	9.59	6.40	3.20
1.65 V/cell	200.0	124.6	108.2	63.5	36.9	21.3	15.93	12.79	10.52	9.69	6.46	3.23