

GLPG 40-12

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	165mm
Container material ABS (UL94-HB), optional UL94-V0	Height	155mm
	Total height	170mm
Terminal	M6 Bolt	
Weight		12kg

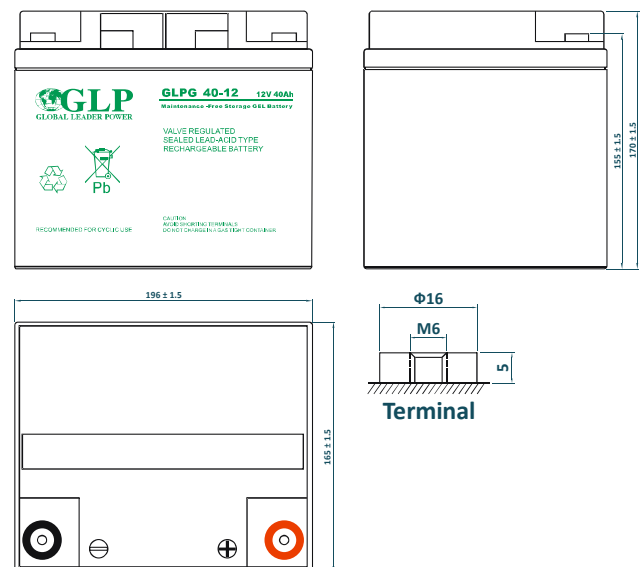
ELECTRICAL SPECIFICATION

Nominal Voltage	12V	
Capacity for 25°C and cut-off voltage 10.5V	20h	$C_{NOM} = 42.4Ah$
	5h	38.2Ah
	1h	25.57Ah
Internal Resistance	Fully charged battery at 25°C 7mΩ	
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.)	12A	
Discharge Current (max.)	400A (5sec)	

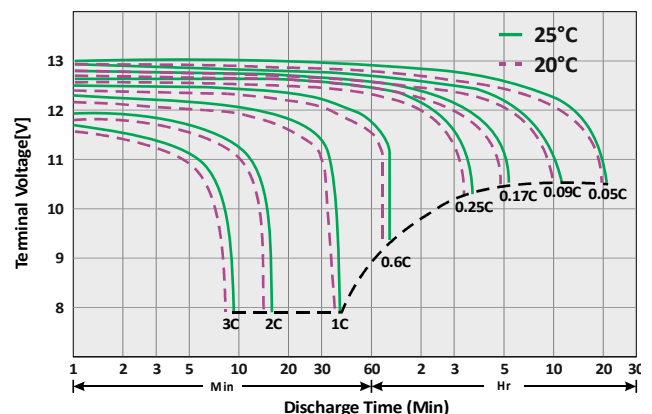
OTHERS

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

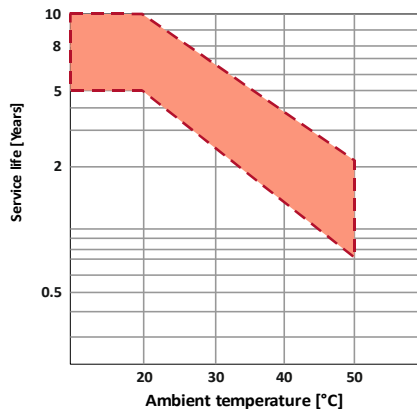
DIMENSIONS



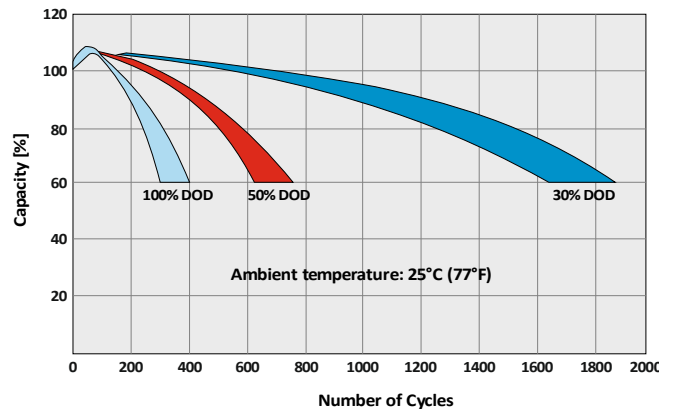
DISCHARGE CURVE



Standby Use Service Life Curve



Cyclic 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	139.51	82.35	64.73	42.19	24.62	14.23	10.93	8.98	7.36	6.00	3.93	2.04
1.80 V/cell	142.17	83.93	65.96	43.0	25.09	14.51	11.14	9.15	7.50	6.11	4.00	2.08
1.75 V/cell	144.84	85.50	67.20	43.80	25.57	14.78	11.35	9.32	7.64	6.23	4.08	2.12
1.70 V/cell	157.87	90.63	71.23	45.55	26.02	15.04	11.55	9.48	7.77	6.33	4.15	2.16
1.65 V/cell	173.81	98.33	77.28	48.10	26.29	15.20	11.67	9.58	7.85	6.40	4.20	2.18

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	272.04	160.59	126.22	82.28	48.02	27.76	21.32	17.50	14.34	11.69	7.66	3.98
1.80 V/cell	277.24	163.66	128.63	83.85	48.94	28.29	21.72	17.84	14.62	11.92	7.80	4.06
1.75 V/cell	282.44	166.73	131.04	85.42	49.85	28.82	22.13	18.17	14.89	12.14	7.96	4.14
1.70 V/cell	307.86	176.73	138.90	88.83	50.73	29.33	22.52	18.49	15.15	12.35	8.10	4.21
1.65 V/cell	338.92	191.73	150.70	93.79	51.27	29.64	22.76	18.69	15.32	12.49	8.18	4.26