



GP Series

GP 12400 Datasheet

12V Top Terminal VRLA-AGM



Valve Regulated Lead Acid (VRLA) Battery

Maintenance-Free, Absorbent Glass Mat (AGM) Technology for Efficient Gas Recombination of up to 99%

Pure Lead Construction and Proprietary Elements

Designed for Float Service Standby Power Applications

Built in Accordance with IEC 61056-1/2:2012 and UL1989 Recognized (MH14533)



Specifications

Voltage (Vdc)	12
Nominal Capacity (1.75 VPC @25°C)	40 Ah @ 20hr-rate
Ah Capacity (8-Hr 1.75 VPC @ 25°C)	43.6
Ah Capacity (20-Hr 1.75 VPC @ 25°C)	48.0
Ah Capacity (8-Hr 1.80 VPC @ 25°C)	43.0
Max Charge Current (A)	12.0
Max Discharge Current (A)	400
Short Circuit Current (A)	1012
Internal Resistance (mΩ)	Approx. 8.5
Terminal Type	12 thread lead alloy terminal to accept M6 bolt
Terminal Torque	51.7±10.3 Kgf·cm / 44.9±9.0 Lbf·in / 5.10±1.0 N·m
Container Material	ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request.
Weight (kg. / lb., Approx.)	12.92 / 28.48
Length (L) (mm / in)	197.0±2.0 / 7.76±0.08
Width (W) (mm / in)	165.0±2.0 / 6.50±0.08
Height (H) (mm / in)	170.4±2.0 / 6.71±0.08
Design Life	Up to 5 Years in Standby Service at 25°C Eurobat (20°C): 3-5 Years Standard Commercial
Operating Temperature	Nominal: 25°C (77°F) Discharge: -15°C - 50°C (5°F-122°F) Charge/Storage: -15°C - 40°C (5°F - 104°F)
Float Charging Voltage	13.5 - 13.8 Vdc/battery 25°C (77°F)
Eq. Charging Voltage	14.4 - 15.0 Vdc/battery 25°C (77°F)
Self-Discharge	Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).



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Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
10.02V (1.67 VPC)	157	112	85.7	51.1	30.2	22.2	17.6	12.7	8.27	5.50	4.52	2.42
10.50V (1.75 VPC)	134	101	80.7	49.5	29.6	21.9	17.4	12.5	8.19	5.45	4.48	2.40
10.80V (1.80 VPC)	121	91.4	75.1	47.3	28.7	21.5	17.1	12.4	8.07	5.37	4.41	2.36

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
10.02V (1.67 VPC)	1596	1185	939	576	345	256	203	147	97.5	65.2	53.7	29.0
10.50V (1.75 VPC)	1450	1092	886	561	340	254	201	145	96.9	64.8	53.4	28.8
10.80V (1.80 VPC)	1332	1013	826	540	332	250	199	144	95.9	64.1	52.8	28.5

