



GPL Series

GPL 12520 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 60896-21/22:2004 and UL1989 Recognized (MH14533)



Specifications

Voltage (Vdc)	12
Nominal Capacity (1.75 VPC @25°C)	52 Ah @20hr-rate
Ah Capacity (8-Hr 1.75 VPC @ 25°C)	49.36
Ah Capacity (20-Hr 1.75 VPC @ 25°C)	52.00
Ah Capacity (8-Hr 1.80 VPC @ 25°C)	48.32
Max Charge Current (A)	15.60
Max Discharge Current (A)	500
Short Circuit Current (A)	1485
Internal Resistance (mΩ)	Approx. 5.1
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	PP (UL 94-HB) & Flame Retardant (94-V0) available upon request
Weight (kg. / lb., Approx.)	17.80 / 39.23
Length (L) (mm / in)	228.0±2.5 / 8.98±0.10
Width (W) (mm / in)	138.4±1.5 / 5.45±0.06
Height (H) (mm / in)	206.3±2.5 / 8.12±0.10
Design Life	Up to 10 Years in Standby Service at 25°C Eurobat (20°C): >12 Years Very Long Life
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)	208	144	110	64.7	38.1	27.4	21.4	15.0	9.57	6.31	5.15	2.65
10.50V (1.75 VPC)	177	128	103	61.2	37.0	26.7	20.7	14.7	9.44	6.17	5.08	2.60
10.80V (1.80 VPC)	159	119	95.7	58.7	35.7	26.0	20.3	14.3	9.22	6.04	4.94	2.56

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)	2176	1589	1235	748	445	323	247	175	113	74.4	61.2	31.6
10.50V (1.75 VPC)	1914	1449	1160	710	434	315	242	171	111	73.9	60.3	31.3
10.80V (1.80 VPC)	1747	1359	1093	683	419	308	235	169	110	72.4	59.5	30.7

