

VOLTCRAFT

VOLTCRAFT - RELIABLE AND PRECISE. SINCE 1982.

For more than 40 years, our product range has been dynamically adapting to the constant changes in the industry. We commit to offering first-class quality to our customers while delivering an excellent cost-performance ratio. This philosophy remains the cornerstone of Voltcraft's success.

VC-12668693 LEAD BATTERY MAINTENANCE-FREE 12 V 40 AH

CE

Item no. 3324603

The rechargeable battery is a lead-lead dioxide system. The dilute sulfuric acid electrolyte is absorbed by the separators and plates and is thus immobilized. Should the battery be accidentally overcharged, producing hydrogen and oxygen, special one-way valves allow the gases to escape, thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak-proof, and usable in any position.

FEATURES

Positive and negative plates in lead-calcium-tin alloy // Stable quality & high reliability // Sealed construction // Long service life // Maintenance-free operation // Low pressure venting system // Low self-discharge // U.L. Component recognition // Six-month shelf life at 20 °C // 10-year design life

TECHNICAL DATA

Battery Construction

Component	Raw material
Positive plate	Lead dioxide
Negative plate	Lead
Container	ABS
Cover	ABS
Safety valve	Rubber
Terminal	Copper
Separator	Fiberglass
Electrolyte	Sulfuric acid

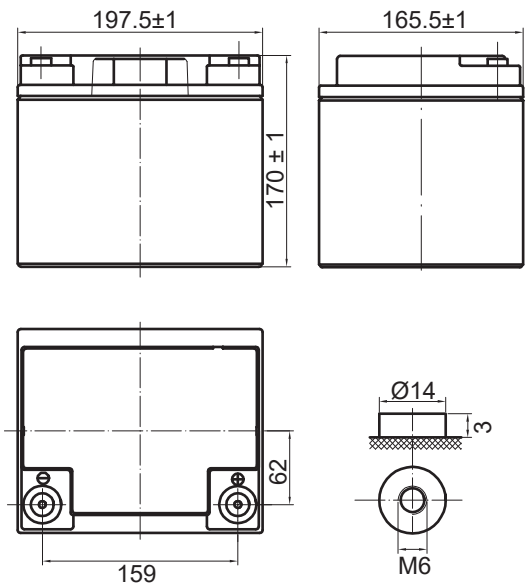


Dimensions & Weight

Product dimension (L x W x H)	197.5 x 165.5 x 170 mm
Total height	170 mm
Weight	approx. 14.7 kg (± 3%)

Performance Characteristics

Nominal voltage	12 V
Number of cell	6 pcs
Design life	10 years
Nominal capacity (25 °C)	10 hour rate (4.0 A, 10.8 V): 40.0 Ah 5 hour rate (7.00 A, 10.5 V): 35.0 Ah 1 hour rate (25.9 A, 9.6 V): 25.9 Ah
Internal resistance of fully charged battery (25 °C)	≤9.5 mOhms
Self-discharge (20 °C)	3% of capacity declined per month (average)
Operating temperature	Discharge: -20 to 60 °C Charge: -10 to 60 °C Storage: -20 to 60 °C
Max. discharge current (25 °C)	400 A (5s)
Short circuit current	900 A
Charge methods	Constant voltage charge (25 °C)
Cycle use	14.4 - 14.7 V
Maximum charging current	12.0 A
Temperature compensation	-30 mV/°C
Standby use	13.2 - 13.8 V
Temperature compensation	-20 mV/°C



Discharge Constant Current (Amperes at 25 °C)

End Point Volts/Cell	10 min	15 min	30 min	45 min	1 h	3 h	5 h	10 h
1.60 V	93.0	73.3	42.0	31.3	25.9	10.7	7.36	4.28
1.65 V	88.4	68.9	40.7	30.6	25.6	10.4	7.24	4.22
1.70 V	83.7	66.7	39.0	30.5	25.2	10.2	7.11	4.21
1.75 V	79.1	64.9	38.0	29.3	24.9	9.95	7.00	4.07
1.80 V	71.9	58.7	36.3	28.9	23.8	9.72	6.80	4.00

Discharge Constant Power (Watts at 25 °C)

End Point Volts/Cell	10 min	15 min	30 min	45 min	1 h	2 h	3 h	5 h
1.60 V	177	141	92.9	70.0	55.6	31.2	23.0	15.0
1.65 V	163	128	82.9	63.8	51.2	29.1	21.7	14.1
1.70 V	155	124	80.3	60.5	50.3	28.3	20.9	13.9
1.75 V	148	120	77.7	59.3	49.5	27.8	20.6	13.7
1.80 V	140	116	75.0	58.0	48.6	27.3	20.2	13.6

Note: The above characteristics data are average values obtained over three charge/discharge cycles, not the minimum values. All data are subject to change without notice. The manufacturer reserves the right to clarify and update the information contained herein.

