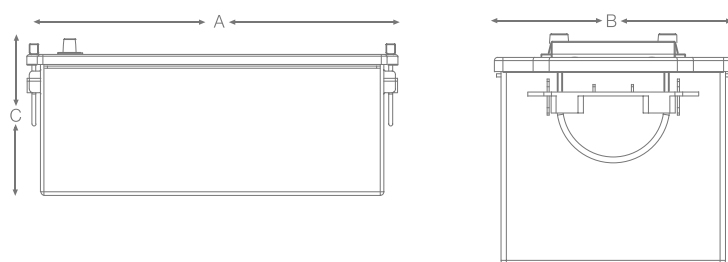


## Renewable & Deep Cycle Bloc Batteries

### R06-12-150

(12V 150Ah @ 20hr)

Werbat valve regulated lead-acid batteries for the deep cyclic market. With an innovative Gel-technology and maintenance free design, Werbat Gel Bloc batteries are compatible with all universal cyclic and renewable applications.



#### Electrical Specifications

Voltage	12V
80% DOD Voltage Cutoff	11.2V
Low Voltage Cutoff	10.8V
Self Discharge	Less than 3% per month (20°C/68°F)
Charge Temperature	Min: -10°C (14°F) / Max: 50°C (122°F)
Discharge Temperature**	Min: -40°C (-40°F) / Max: 50°C (122°F)
Storage	Min: -20°C (-4°F) / Max: 60°C (140°F)

Amp Hours (AH)						
120 HR	100 HR	72 HR	20 HR	10 HR	5 HR	3 HR
154	153	151	150	146	129	123

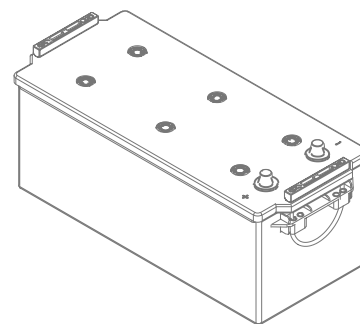
\*\* CAUTION: Depths of discharge, operating voltages and currents, when designing systems for use at maximum temperatures, will vary.

#### Mechanical Specifications

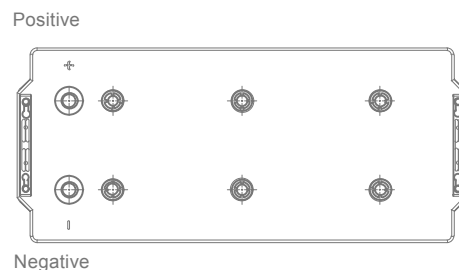
Industry Reference	4D	
Length (A)	20.2 in	512 mm
Width (B)	8.8 in	222 mm
Height (C)	8.7 in	221 mm
Weight	110 lbs	50 kgs
Terminal (Opt'l)*	A-Pole (Industrial Terminal optional)	
Cell(s)	6	
Electrolyte	Gel	
Terminal Torque Nm	n/a	

NOTE: There is a tolerance of +/-2%.

WERBAT/DATAGELDEEPCYCLE R0612150



Part of our Bloc Batteries range



#### Features

Maintenance-free bloc batteries in Gel technology (no topping up during lifetime)

Good high current performance for extreme operating conditions

High-class patented safety valve

700 cycles (IEC 61427 / 60896-21/22)

Capacity: 12V 55Ah - 200Ah (C<sub>20</sub>)

Valve-regulated lead-acid battery

Recyclable

Long cycle life

Classified as a non-spillable battery is not restricted for transportation by:

- Air (IATA/ICAO provision 67)
- Ground (STB, DOT-CFR-HMR49)
- Water (IMDG amendment 27)

#### Applications

Solar

Home Inverter

Renewable Energy

Deep Cycle Applications

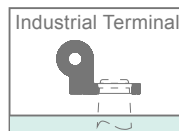
Compliant with IEC 61427 / 60896-21/22

## Charging profile

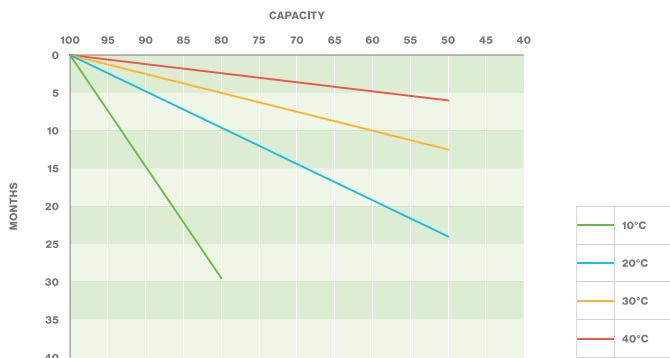
**IU Charging** I = min. 12% C5 max. 18% C5  
U = 2.4 V per cell

**IUI Charging** I1 = min. 12% C5 max. 18% C5  
U = 2.35 V per cell  
I2 = 1.5 % C5 for max. 4 hours

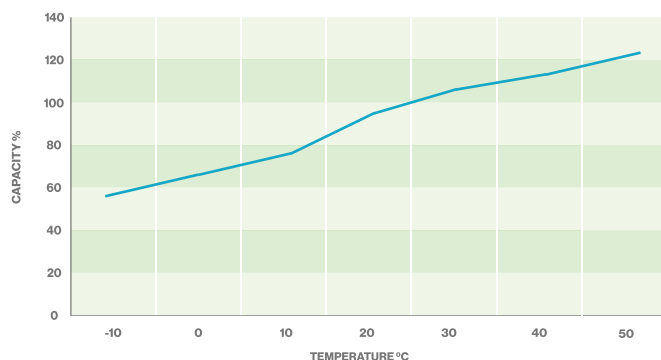
## Torque



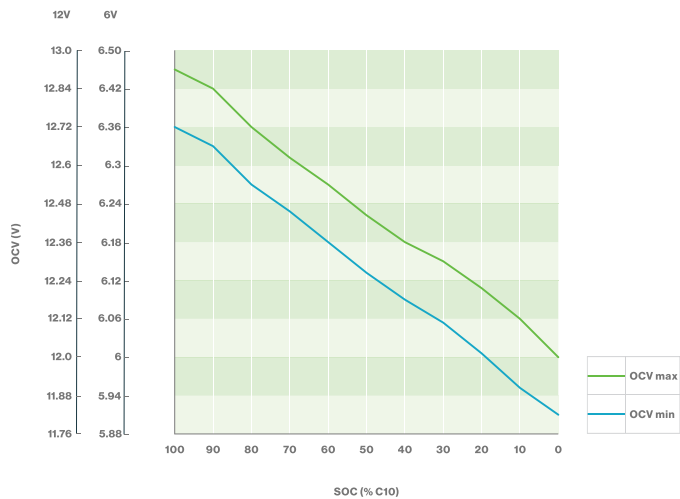
## Self discharge at different temperatures



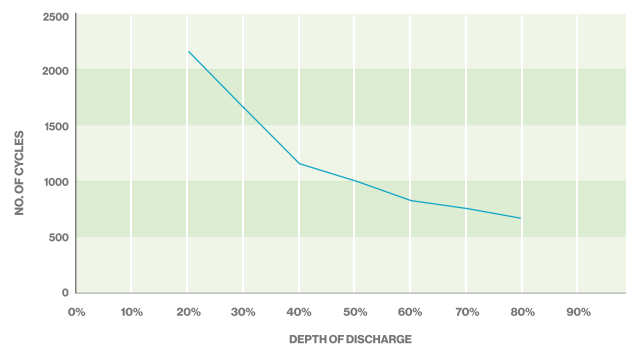
## Capacity vs. temperature



## Storage: Determine the state of charge



## Cycle life vs. depth of discharge (25°C)



## Relation between charging, voltage and temperature

