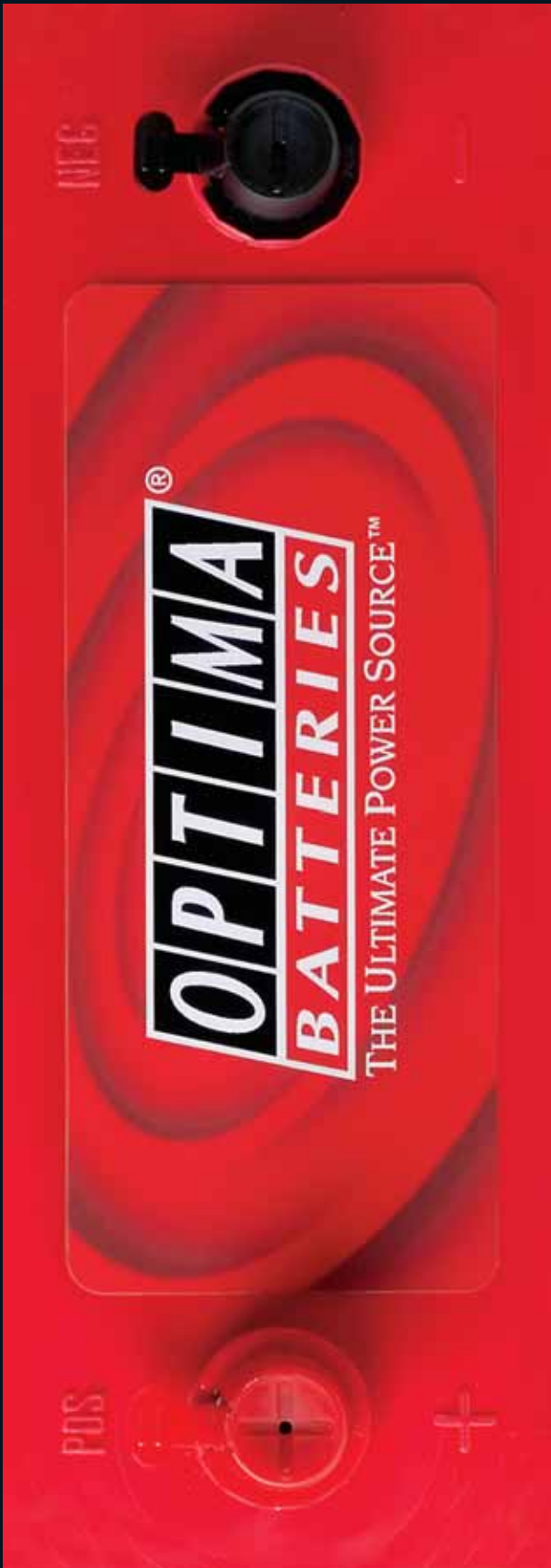


# THE ULTIMATE POWER SOURCE



AGRICULTURE · CONSTRUCTION MACHINERY · GENERATORS · EMERGENCY VEHICLES

**OPTIMA**  
BATTERIES  
THE ULTIMATE POWER SOURCE™



Johnson  
Controls 



Up to 3 times  
quicker recharging



Over 15 times  
more vibration resistance



## OPTIMA® YELLOWTOP® DUAL PURPOSE (STARTING & SEMI TRACTION) BATTERIES

OPTIMA® YellowTop® is made to install and forget. No matter the conditions, be it dampness, heat, dirt or exposure to extremes in vibration or regular discharge, it is guaranteed to deliver uninterrupted power throughout the entire discharge cycle. The ability to hold a higher voltage during the discharge cycle makes it possible to utilize more of the stored power in the OPTIMA®, compared to ordinary batteries. All of these benefits are due to OPTIMA's® Spiralcell® Technology, which combines the advantages of a starting battery with those of a deep cycle battery. The YellowTop® handles many discharges as well as re-charges without losing significant capacity and is also ideal for seasonal use because of its very low self-discharge rate.



**OPTIMA**<sup>®</sup>  
**BATTERIES**  
THE ULTIMATE POWER SOURCE™







100% spill-proof  
and maintenance free



Starting power equivalent  
to batteries 2-3 times  
OPTIMA's® size and weight



## OPTIMA® REDTOP® STARTER BATTERIES\*

For agricultural use, where machinery is used seasonally, the OPTIMA® RedTop® shows its outstanding starting capacity. Even if the battery has been left out in the tractor or harvester over the winter, the RedTop® will provide starting power the first time.\* The key to the RedTop's® remarkable starting power is OPTIMA's® SpiralCell® Technology. This makes it possible to start heavy diesel engines with a battery, as compact as an ordinary automobile battery, which can be mounted in areas with very little space. This powerful package also shows unparalleled resistance to vibration, knocks and bumps. The RedTop's® robust, leak free construction stands up to the toughest conditions, without power interruption.

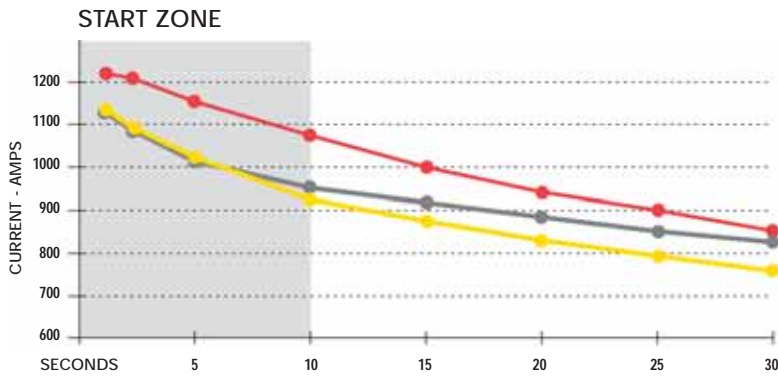
\*The battery should be disconnected during extended periods of non-use.



**OPTIMA**  
**BATTERIES**  
THE ULTIMATE POWER SOURCE™

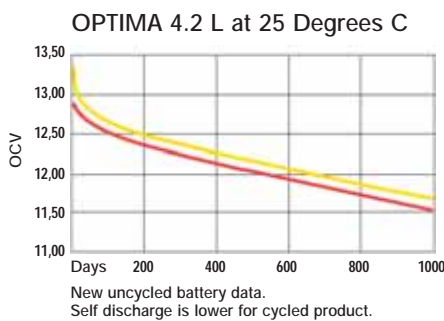


# PRODUCT BENEFITS



More starting power  
OPTIMA® Batteries deliver a higher level of power to the starter in the critical first 10 seconds of the vehicle starting cycle.

- OPTIMA® RedTop®
- OPTIMA® YellowTop®
- Traditional Battery



## Long shelf life

OPTIMA® Batteries are ideal for vehicles that are used seasonally because of their low self-discharge rate. All batteries that sit unused for extended periods of time will begin to lose charge. But OPTIMA® Batteries retain a significantly greater amount of power, enough to start large vehicles like tractors, harvesters, and recreational vehicles even after a long winter of no use.

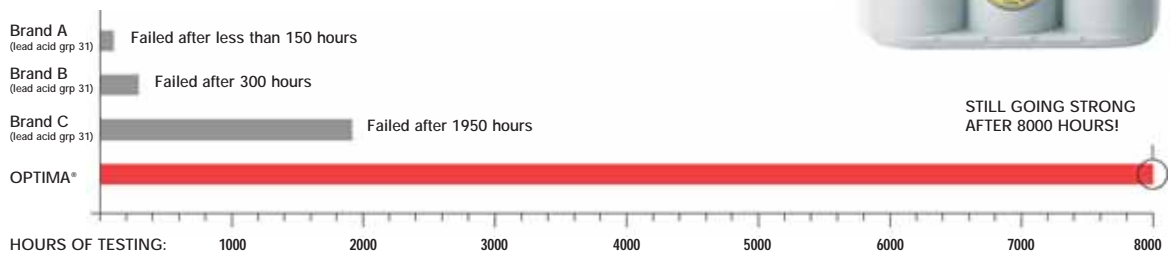
- OPTIMA® RedTop® 4.2
- OPTIMA® YellowTop® 4.2

## Shake it up!

Damage from vibration is a leading cause of battery failure. OPTIMA® Batteries have over 15 times more vibration resistance than traditional batteries due to patented Spiralcell® Technology.

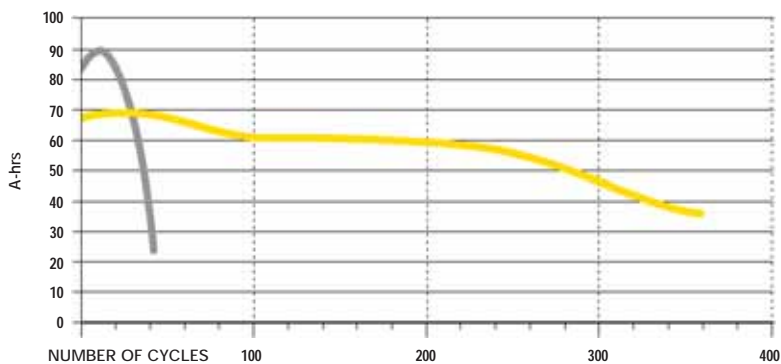
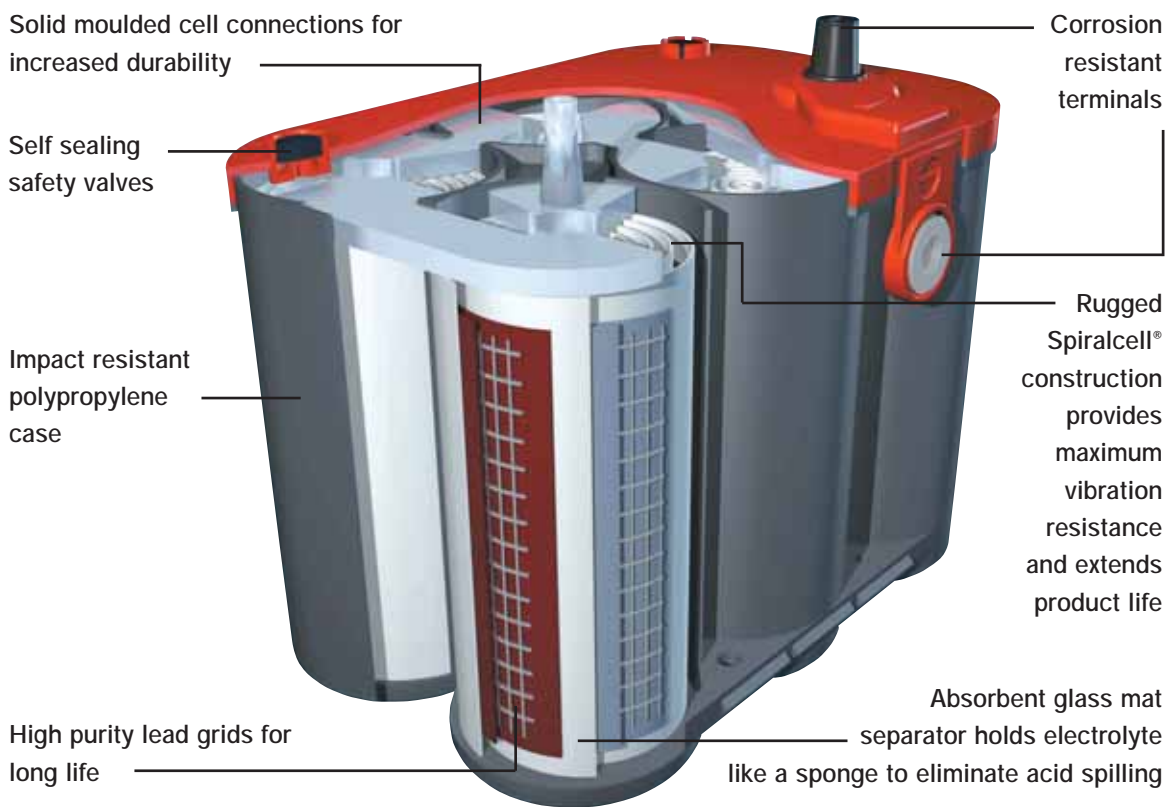


STILL GOING STRONG  
AFTER 8000 HOURS!



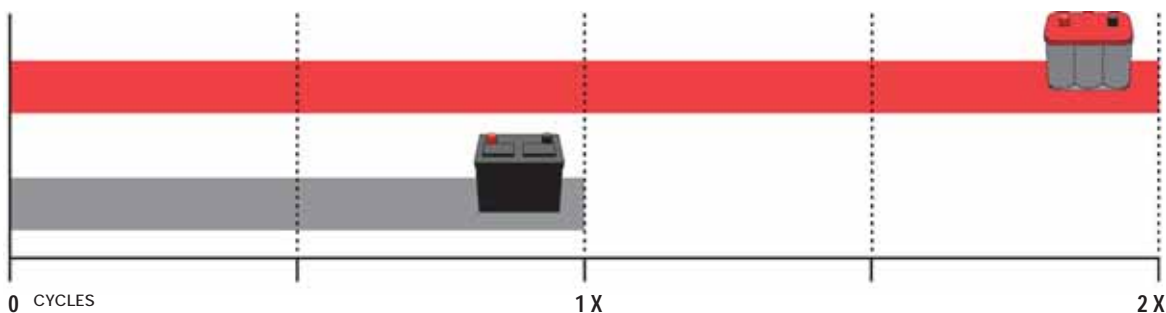
**OPTIMA**  
BATTERIES  
THE ULTIMATE POWER SOURCE™





Repetitive reserve capacity  
OPTIMA® Batteries have the ability to withstand significantly more discharge/recharge cycles and still accept a high percentage of the original full capacity.

- OPTIMA® YellowTop® 75 Ah/C20
- Traditional battery 98 Ah/C20



Up to 2 times longer life  
(when compared to traditional batteries) Damage from heat is the leading cause of battery failure. Even in high heat environments, OPTIMA® Batteries can outlast traditional batteries by up to 2 times.



## OPTIMA® YELLOWTOP®

	YT S 5,5 (BCI D31A)	YT S 4,2 (BCI D34)	YT U 4,2 (BCI D34/78)	YT R 3,7 (BCI D35)	YT S 2,7 (BCI D51)	YT S 2,7 J (BCI D51)	YT R 2,7 (BCI D51R)	YT R 2,7 J (BCI D51R)	YT S 2,1 (6 VOLT)
Part Number	851 187 000 888 2	812 254 000 888 2	814 254 000 888 2	840 222 000 888 2	871 176 000 888 2	870 176 000 888 2	873 176 000 888 2	872 176 000 888 2	818 356 000 888 2
Length base: mm	317	245	245	229	228	228	228	228	253
Length top cover: mm	325	254	254	237	237	237	237	237	254
Height not including terminals: mm	218	173	173	168	201	201	201	201	176
Height including terminals: mm	238	200	200	197	227	227	227	227	203
Width base: mm	158	172	172	172	121	121	121	121	83
Width top cover: mm	165	175	175	171	129	129	129	129	90
Nominal Voltage: V	12	12	12	12	12	12	12	12	6
Cold Cranking Amps: (EN) CCA	975	765	765	660	460	460	460	460	765
Capacity: (EN) Ah	75	55	55	48	38	38	38	38	55
Reserve Capacity: (BCI) Min	155	120	120	98	66	66	66	66	120
Weight: kg	26,5	19,5	19,9	16,6	11,8	11,8	11,8	11,8	9,5

## OPTIMA® REDTOP®

	RT C 4,2 (BCI 34C)	RT S 4,2 (BCI 34)	RT R 4,2 (BCI 34R)	RT U 4,2 (BCI 34/78)	RT F 4,2 (BCI 78)	RT S 3,7 (BCI 25)	RT R 3,7 (BCI 35)	RT U 3,7 (BCI 75/25)	RT S 2,1 (6 VOLT)
Part Number	801 287 000 888 2	802 250 000 888 2	803 251 000 888 2	804 250 000 888 2	878 209 000 888 2	820 255 000 888 2	835 255 000 888 2	822 255 000 888 2	810 355 000 888 2
Length base: mm	245	245	255	245	245	229	229	229	255
Length top cover: mm	254	254	254	254	254	237	237	237	252
Height not including terminals: mm	184	173	173	173	184	168	168	168	185
Height including terminals: mm	200	200	200	200	184	197	197	197	206
Width base: mm	172	172	172	172	172	172	172	172	83
Width top cover: mm	175	175	175	175	185	171	171	171	90
Nominal Voltage: V	12	12	12	12	12	12	12	12	6
Cold Cranking Amps: (EN) CCA	815	815	815	815	815	730	730	730	815
Capacity: (EN) Ah	50	50	50	50	50	44	44	44	50
Reserve Capacity: (BCI) Min	100	100	100	100	100	90	90	90	110
Weight: kg	17,2	17,2	17,2	17,6	17,5	14,4	14,4	15	8,3

## CHARGING INFORMATION

**ALTERNATOR 13.8 to 15.0 volts**

**BATTERY CHARGER (Constant Voltage) 13.8 to 15.0 volts, 10 amps, 12-15 hours approximate**

**FLOAT CHARGE 13.2 to 13.8 volts, 1 amp maximum current**

**RAPID RECHARGE (Constant Voltage Charger) Maximum voltage 15.6 volts. No current limit as long as temperature remains below 50°C. Charge until current drops below 1 amp.**

**RECHARGE TIME (Example assuming 100% discharge - 10.5 volts)**

AMPERAGE	APPROX. TIME TO 90% CHARGE	
	4,2	5,5
100 amps	35 minutes	52 minutes
50 amps	75 minutes	112 minutes
25 amps	140 minutes	210 minutes

Recharge time will vary according to temperature and charger characteristics. When using Constant Voltage chargers, current will taper down as the battery becomes recharged. When current drops below 1 amp, the battery will be close to a full state of charge.

**CYCLIC APPLICATION OR STRING SERIES APPLICATIONS Constant Voltage with Constant Current finish (CC/CV): 14.7 volts, temperature < 50°C, no current limits. When current falls below 1 amp, finish with 3 amps constant current for 1 hour for type 5,5 and 2 amps for all other types.**

(All charge recommendations assume an average room temperature of 25°C)

Your authorised dealer/distributor

[www.optimabatteries.com](http://www.optimabatteries.com)