



*Rolls*

BATTERY ENGINEERING

---

**RENEWABLE ENERGY**





RENEWABLE ENERGY SERIES

Rolls premium deep cycle batteries have been  
chosen as the best off-grid battery for over 25 years.

*Rolls*



4 KS 25P



S2 LI6



R12-150LFP



S6-460AGM-RE

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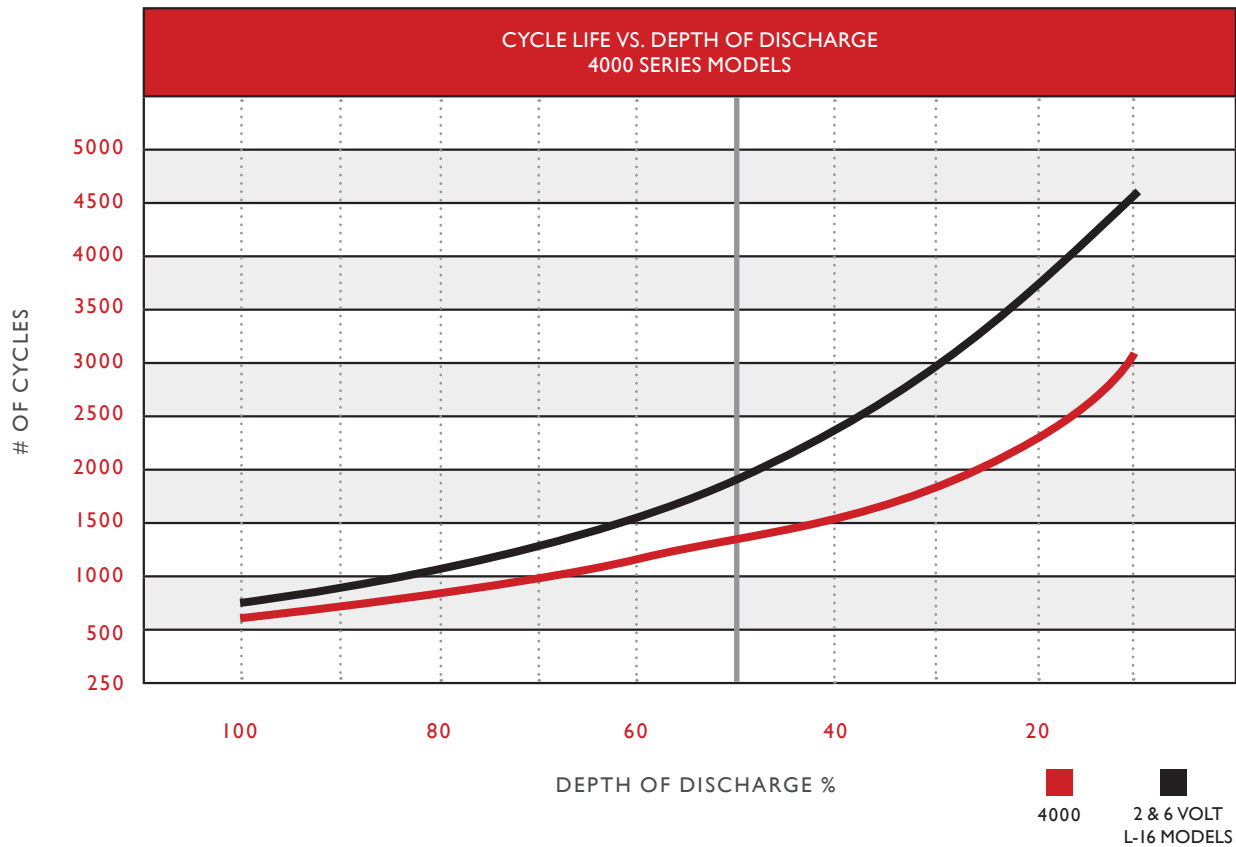
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14	Maintenance-Free AGM-R
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## 4000 SERIES

Rolls Battery 4000 Series product range offers a full range of voltage and capacity options. Our most popular models are based on the well recognized L-16, group 24 and 27 sizes with improved capacity, liquid reserve (up to 2.75") and cycle life.

MODEL	10 HR RATE AH	20 HR RATE AH	100 HR RATE AH	BCI	TERMINAL TYPE	LENGTH MM	WIDTH MM	HEIGHT MM	WEIGHT KG
<b>ROLLS BATTERY 4000 SERIES: 2 VOLT</b>									
S2 LI6	1052	1169	1344	L-16	LT	318mm	181mm	432mm	54.5kg
S2 LI6-HC	1202	1335	1535	L-16	LT	318mm	181mm	432mm	57.5kg
S2 LI6-SC	1353	1503	1728	L-16	LT	318mm	181mm	432mm	59kg
<b>ROLLS BATTERY 4000 SERIES: 6 VOLT</b>									
S6 GC2-HC	212	241	308	GC2	DT	259mm	181mm	279mm	31.5kg
S6 I45	220	250	320	GC2H	DT	259mm	181mm	290mm	32kg
S6 LI6	351	390	449	L-16	LT	318mm	181mm	425mm	51kg
S6 LI6-HC	401	445	512	L-16	LT	318mm	181mm	425mm	55.5kg
S6 LI6-SC	438	487	560	L-16	LT	318mm	181mm	425mm	56.5kg
<b>ROLLS BATTERY 4000 SERIES: 12 VOLT</b>									
S12 24	72	85	106	24	DT	279mm	171mm	238mm	21.5kg
S12 27	89	105	140	27	DT	321mm	171mm	238mm	24.5kg
S12 31	111	130	173	31	DT	330mm	171mm	241mm	29.5kg
S12 GC	136	155	206	GC12	UTL	333mm	182mm	274mm	37.5kg
S12 I85	185	210	279	92I	DT	391mm	178mm	365mm	52kg

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process, battery components & electrolyte levels.



\*Cycle life may vary by application and is affected by frequency of cycling, operating temperature, depth of discharge (%DOD), adherence to manufacturer-recommended charging parameters and proper maintenance.

#### IEC Testing

International Electrotechnical Commission's (IEC) standard 61427-1:2013 outlines performance criteria used to measure all deep cycle secondary cells and batteries used in PV (Photovoltaic) off-grid energy storage applications. Independent IEC testing has demonstrated and confirmed that Rolls Battery 4000 Series 6-volt and 2-volt L-16 models, 4500 Series 6-volt and 2-volt L-16 models, and 5000 Series 2-volt, 4-volt, 6-volt, 8-volt and 12-volt premium flooded deep cycle models meet and exceed the requirements of operation in conditions of Partial State of Charge (PSOC) as well as continuous heavy discharge & recharge.

Visit <http://rollsbattery.com/rolls-battery-iec-testing> for information on the independent IEC 61427-1:2013 testing performed by Dalhousie University Renewable Energy Storage Laboratory (RESL).



S6 LI6    S6 LI6-HC    S6 GC2    S2 LI6-SC

## 4000 FEATURES

- Heavy plate construction
- Industry leading liquid reserves
- 3 year warranty
- 12 year average life\*
- Unsurpassed cycling

## 4500 SERIES

Offered in 2 volt and 6 volt configurations, Rolls 4500 Series models provides the convenience of the popular L-16 case design with added durability and cycle life found in our heavy grade 5000 Series plate construction. The result, a versatile L-16 model with an impressive 3700 cycles @ 50% DOD, backed by a 4 year full replacement warranty.

**NEW** Adding to Rolls 4500 Series exceptional performance and added cycle life, these popular 2-volt & 6-volt L-16 models now feature enhanced negative plate construction with Rolls Battery proprietary Advanced NAM carbon blend.



**ADVANCED  
NAM**

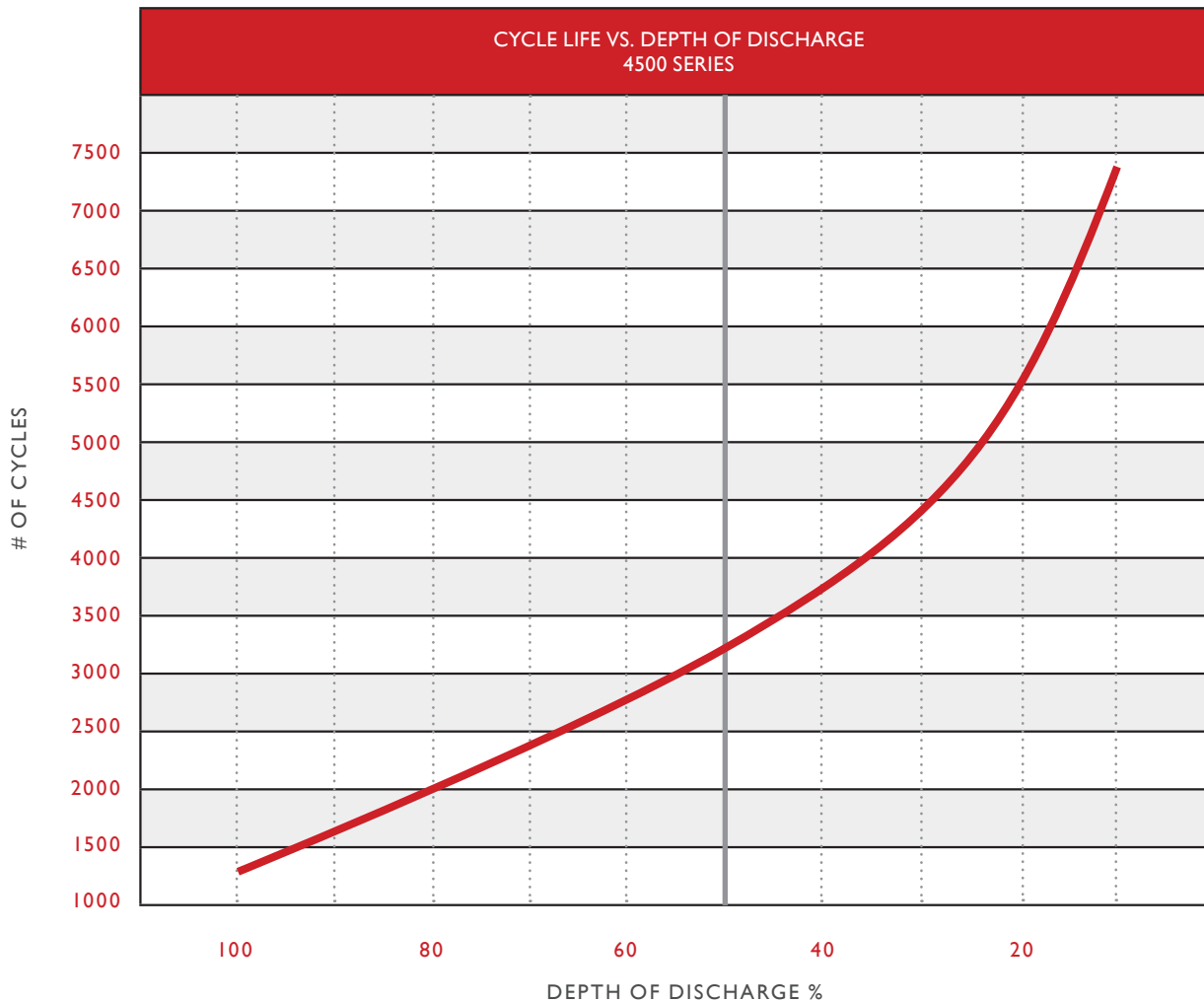
- Quicker & More Efficient Charging
- Improved Cycle Life
- Higher Capacity
- Enhanced PSOC Performance

MODEL	10 HR RATE AH	20 HR RATE AH	100 HR RATE AH	BCI	TERMINAL TYPE	LENGTH MM	WIDTH MM	HEIGHT MM	WEIGHT KG
ROLLS BATTERY 4500 SERIES: 2 VOLT									
S2 LI6-EX	926	1040	1342	L-16	LT	318mm	181mm	432mm	58kg
ROLLS BATTERY 4500 SERIES: 6 VOLT									
S6 LI6-EX	330	371	479	L-16	LT	318mm	181mm	425mm	59kg

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process, battery components & electrolyte levels.

ROLLS ACCESSORIES		
		
Rolls R-Cap	Hydrometer	Interconnect Cables

Contact your Rolls Battery Distributor or Dealer for more information.



\*Cycle life may vary by application and is affected by frequency of cycling, operating temperature, depth of discharge (%DOD), adherence to manufacturer-recommended charging parameters and proper maintenance.

**IEC Testing**

International Electrotechnical Commission's (IEC) standard 61427-1:2013 outlines performance criteria used to measure all deep cycle secondary cells and batteries used in PV (Photovoltaic) off-grid energy storage applications. Independent IEC testing has demonstrated and confirmed that Rolls Battery 4000 Series 6-volt and 2-volt L-16 models, 4500 Series 6-volt and 2-volt L-16 models, and 5000 Series 2-volt, 4-volt, 6-volt, 8-volt and 12-volt premium flooded deep cycle models meet and exceed the requirements of operation in conditions of Partial State of Charge (PSOC) as well as continuous heavy discharge & recharge.

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S6 L16-EX

S2 L16-EX

## 4500 FEATURES

- Heavy plate construction
- Industry's leading liquid reserve
- Included Rolls R-Cap
- 4 year warranty
- 15 year average life\*
- Extended cycling



## 5000 SERIES

Our unique battery design features dual container construction. Each cell is self contained in a high temperature-retardant, durable polypropylene case. The outer container is made of high-density unbreakable polyethylene, providing double protection from breakage and acid leakage. Cell replacement is clear and concise with bolt-on connectors, allowing the battery to be assembled or repaired on location.

**NEW** All Rolls 5000 Series Renewable Energy models now feature enhanced negative plate construction with Rolls Battery proprietary Advanced NAM carbon blend.



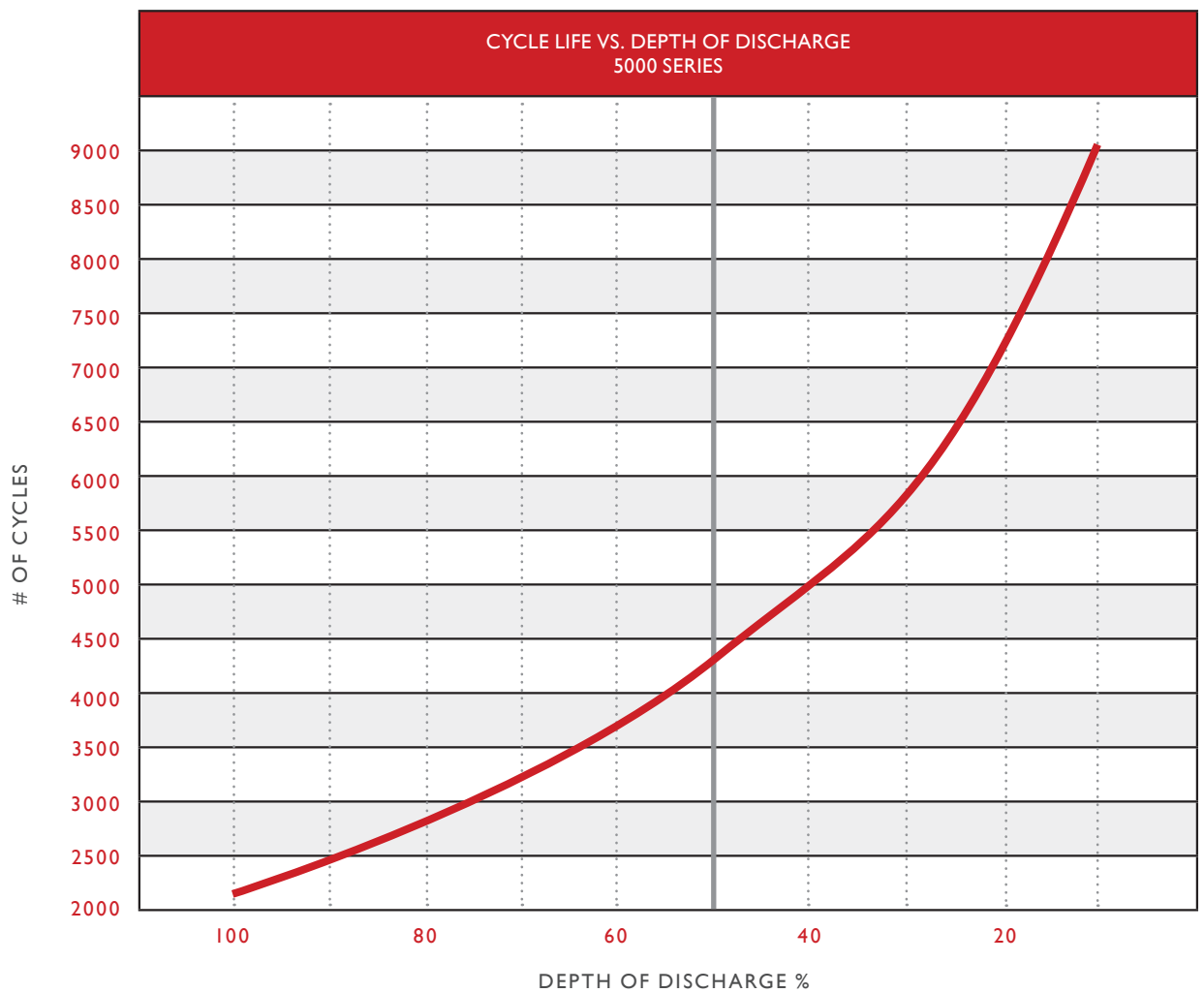
**ADVANCED  
NAM**

- Quicker & More Efficient Charging
- Improved Cycle Life
- Higher Capacity
- Enhanced PSOC Performance

MODEL	10 HR RATE AH	20 HR RATE AH	100 HR RATE AH	BCI	TERMINAL TYPE	LENGTH MM	WIDTH MM	HEIGHT MM	WEIGHT KG
<b>ROLLS BATTERY 5000 SERIES: 2 VOLT</b>									
2 KS 33P	1635	1837	2369	SPEC.	FLAG	392mm	211mm	630mm	94kg
2 OS 33P	1740	1955	2522	SPEC.	FLAG	392mm	211mm	630mm	100.5kg
2 YS 27P	1949	2190	2825	SPEC.	FLAG	356mm	229mm	803mm	111.5kg
2 YS 31P	2249	2527	3260	SPEC.	FLAG	394mm	229mm	803mm	129kg
2 YS 62P	4498	5054	6520	SPEC.	FLAG	695mm	267mm	803mm	258.5kg
<b>ROLLS BATTERY 5000 SERIES: 4 VOLT</b>									
4 CS 17P	505	568	733	SPEC.	FLAG	365mm	210mm	464mm	58kg
4 KS 21P	1022	1148	1481	SPEC.	FLAG	400mm	238mm	629mm	121kg
4 KS 25P	1250	1404	1811	SPEC.	FLAG	400mm	270mm	629mm	142.5kg
4 KS 27P	1351	1518	1959	SPEC.	FLAG	400mm	270mm	629mm	153.5kg
<b>ROLLS BATTERY 5000 SERIES: 6 VOLT</b>									
6 CS 17P	505	568	733	SPEC.	FLAG	559mm	210mm	464mm	100kg
6 CS 21P	632	710	916	SPEC.	FLAG	559mm	248mm	464mm	122.5kg
6 CS 25P	759	853	1100	SPEC.	FLAG	559mm	286mm	464mm	144kg
6 CS 27P	827	929	1198	SPEC.	FLAG	559mm	286mm	464mm	155kg
<b>ROLLS BATTERY 5000 SERIES: 12 VOLT</b>									
12 CS 11P	330	371	479	SPEC.	FLAG	559mm	286mm	464mm	123kg

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process, battery components & electrolyte levels.





\*Cycle life may vary by application and is affected by frequency of cycling, operating temperature, depth of discharge (%DOD), adherence to manufacturer-recommended charging parameters and proper maintenance.

**IEC Testing**  
International Electrotechnical Commission's (IEC) standard 61427-1:2013 outlines performance criteria used to measure all deep cycle secondary cells and batteries used in PV (Photovoltaic) off-grid energy storage applications. Independent IEC testing has demonstrated and confirmed that Rolls Battery 4000 Series 6-volt and 2-volt L-16 models, 4500 Series 6-volt and 2-volt L-16 models, and 5000 Series 2-volt, 4-volt, 6-volt, 8-volt and 12-volt premium flooded deep cycle models meet and exceed the requirements of operation in conditions of Partial State of Charge (PSOC) as well as continuous heavy discharge & recharge.

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**ENHANCED PERFORMANCE & CYCLE LIFE**

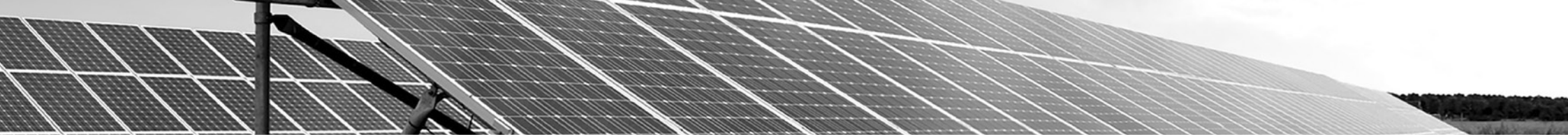


2 KS 33P    2 YS 31P

## 5000 FEATURES

- Advanced NAM additive for quicker & more efficient charging, increased capacity & improved cycle life
- Widest range of specifications available
- Modular dual container construction
- Computer controlled formation
- Robotically welded
- Included Rolls R-Cap
- 5 year warranty
- 15 year average life\*
- Load and capacity tested prior to shipping





## R - SERIES LFP

Rolls high performance 12V & 24V Lithium-Iron-Phosphate (LiFePO<sub>4</sub>) batteries provide a compatible drop-in SLA replacement with fast charging/ discharging capability, compact case design, 48V connectivity and are up to 50% lighter than equivalent lead-acid battery models.

MODEL	VOLTAGE	RATED CAPACITY [Ah]	RATED CAPACITY [kWh]	BCI	TERMINAL TYPE	LENGTH MM	WIDTH MM	HEIGHT MM	WEIGHT KG
<b>12 VOLT</b>									
R12-100LFP	12.8V	100	1.28 kWh	24	M8	260mm	170mm	211mm	11.5kg
R12-135LFP	12.8V	135	1.728 kWh	31	M8	330mm	173mm	219mm	15kg
R12-150LFP	12.8V	150	1.92 kWh	31	M8	330mm	173mm	219mm	15.5kg
R12-200LFP	12.8V	200	2.56 kWh	49	M8	490mm	171mm	243mm	22kg
R12-300LFP	12.8V	300	3.84 kWh	8D	M8	521mm	267mm	223mm	33kg
<b>24 VOLT</b>									
R24-50LFP	25.6V	50	1.28 kWh	24	M8	260mm	170mm	211mm	12kg
R24-100LFP	25.6V	100	2.56 kWh	49	M8	490mm	171mm	243mm	22kg
R24-150LFP	25.6V	150	3.84 kWh	8D	M8	521mm	267mm	223mm	33.5kg

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process.



R12-135LFP



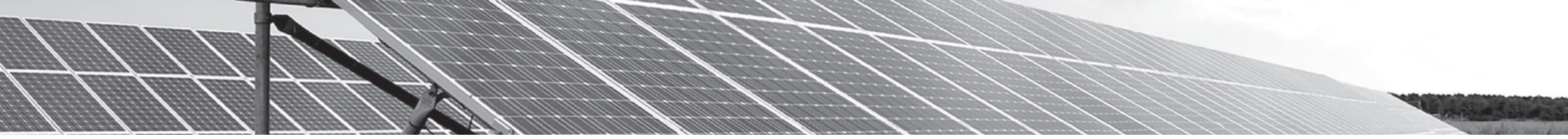
R24-100LFP

## R - SERIES SAFETY & CERTIFICATION

- Built-in Battery Management System (BMS)
- Cylindrical LiFePO<sub>4</sub> cells (UL1642)
- IEC62133 (cell), IEC62619(cell), ROHS (cell)
- UN38.3 (cell/pack)
- CE system certification
- IP65 Rating

## R - SERIES FEATURES

- Cylindrical LiFePO<sub>4</sub> cells
- Standard-size (BCI) ABS container for easy VRLA AGM replacement
- Lightweight, compact design with standard M8 terminal
- Fast charge/discharge performance
- Maintenance-free operation
- Battery Management System (BMS) for balanced charging & protections
- Connect up to 4 in Series or Parallel for 48V system configuration
- 6000 cycles @ 80% DOD, 3000 cycles @ 100% DOD



## R - SERIES LFP

BMS PROTECTIONS
Short-Circuit Protection
Over-Voltage Protection
Low-Voltage Protection
Over-Current Protection
Low-Temperature Protection
Over-Temperature Protection

CONNECTION*		
MODEL	SERIES	PARALLEL
12V MODELS	4	4
24V MODELS	2	4

\*Maximum 48V system configuration

Connect up to four (4) 12V models in series for 48V configuration and 12V or 24V models up to four (4) in parallel for increased capacity.

\*Refer to Rolls R-Series LFP Battery Operating Manual for detailed instructions.

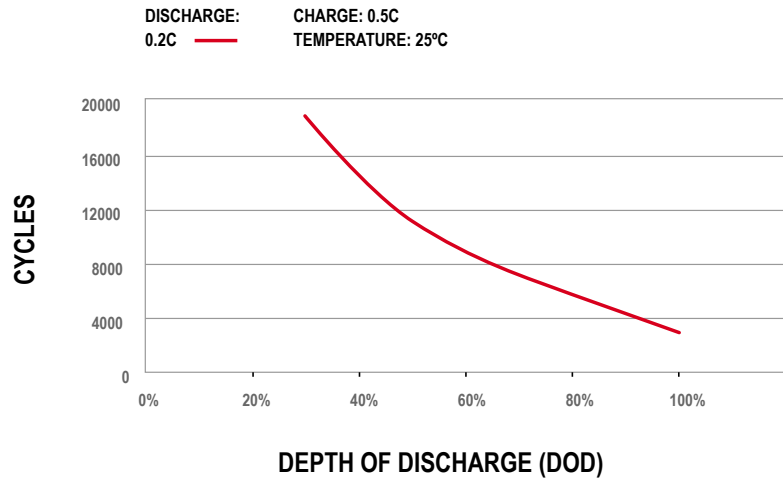


OPERATING TEMPERATURE RANGE	
CHARGE	0°C(32°F)~55°C(131°F)
DISCHARGE	-20°C(4°F)~60°C(140°F)
STORAGE	-5°C (23°F)~45°C (113°F)

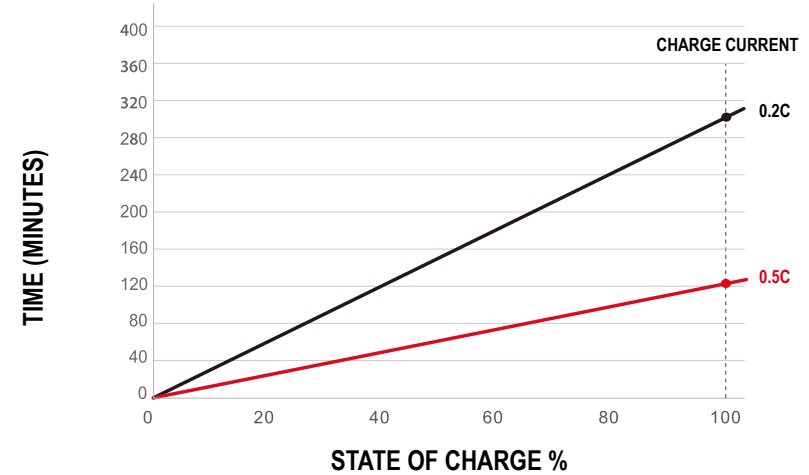


## R - SERIES LFP

### CYCLE LIFE VS DEPTH OF DISCHARGE @ 25°C



### CHARGE TIME 0.2C / 0.5C @ 25°C

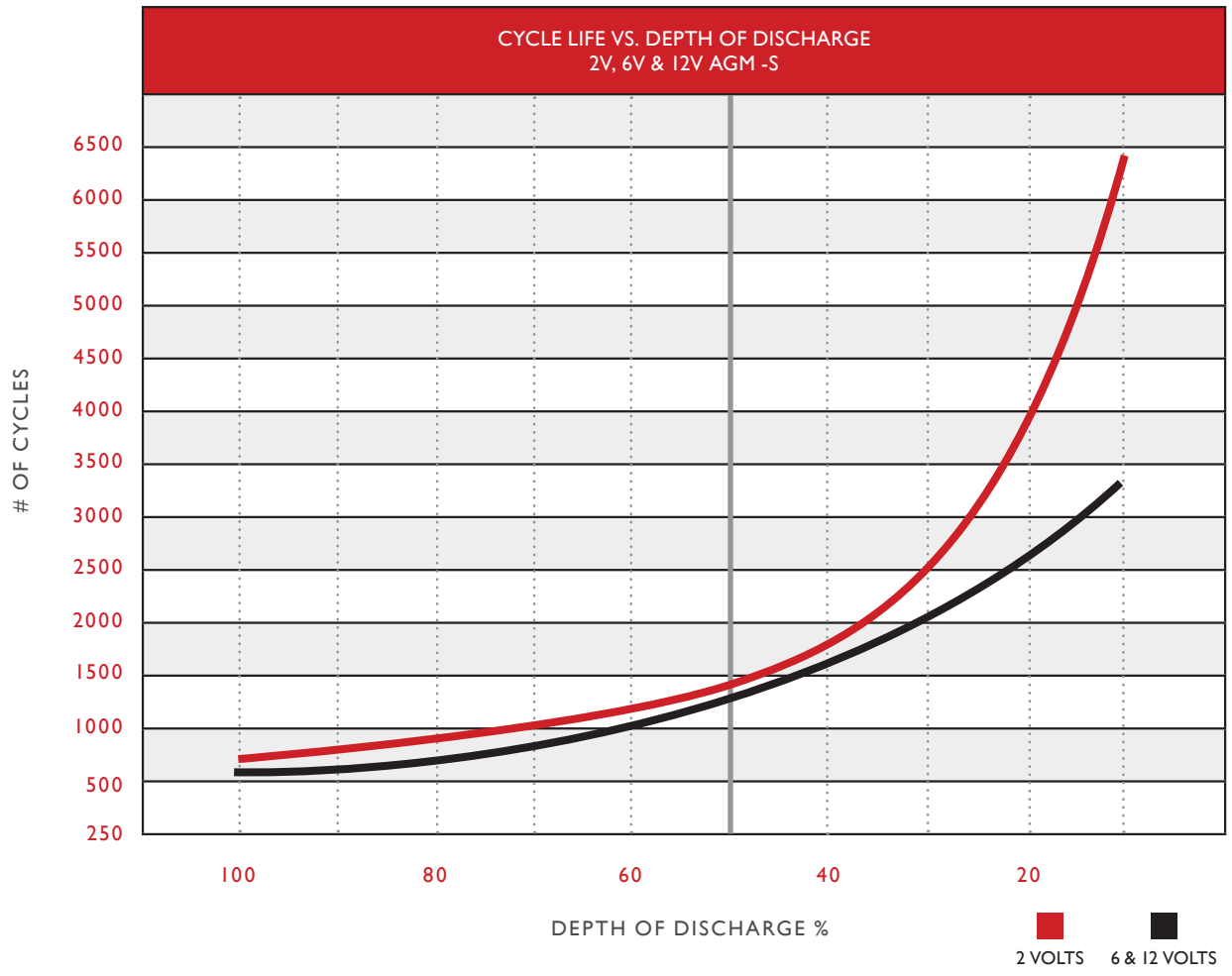


## AGM - S

Rolls high quality AGM-S VRLA batteries offer true deep cycle performance, increased capacity and extended cycle life in a rugged, sealed, shock and vibration-resistant ABS case design for added durability, ideal for a variety of remote and confined off-grid, grid-tied and backup applications.

MODEL	VOLTAGE	10 HR RATE AH	20 HR RATE AH	100 HR RATE AH	TERMINAL TYPE	LENGTH MM	WIDTH MM	HEIGHT MM	WEIGHT KG
<b>ROLLS BATTERY AGM-S: 2 VOLT</b>									
S2-1275AGM-RE	2 V	1040	1150	1275	F10	295mm	179mm	424mm	57.5kg
<b>ROLLS BATTERY AGM-S: 6 VOLT</b>									
S6-275AGM-RE	6 V	229	250	275	M8-TP08	262mm	181mm	281mm	34.5kg
S6-370AGM-RE	6 V	300	335	370	DT	295mm	179mm	365mm	48kg
S6-460AGM-RE	6 V	374	415	460	DT-M10	295mm	179mm	424mm	57kg
<b>ROLLS BATTERY AGM-S: 8 VOLT</b>									
S8-200AGM-RE	8 V	162	170	200	DT	260mm	182mm	314mm	34.5kg
S8-230AGM-RE	8 V	190	200	230	DT	260mm	182mm	314mm	38kg
<b>ROLLS BATTERY AGM-S: 12 VOLT</b>									
S12-95AGM-RE	12 V	77	85	95	DT	260mm	169mm	237mm	23kg
S12-116AGM-RE	12 V	95	105	116	DT	307mm	169mm	237mm	30kg
S12-128AGM-RE	12 V	104	115	128	DT	328mm	175mm	237mm	32kg
S12-160AGM-RE	12 V	126	145	160	DT	341mm	172mm	309mm	44kg
S12-230AGM-RE	12 V	189	210	230	LT	530mm	209mm	239mm	61.5kg
S12-240AGM-RE	12 V	193	215	240	DT	381mm	178mm	371mm	63.5kg
S12-290AGM-RE	12 V	234	260	290	LT	521mm	269mm	245mm	74kg

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process, battery components & electrolyte levels.









S2-1275AGM-RE

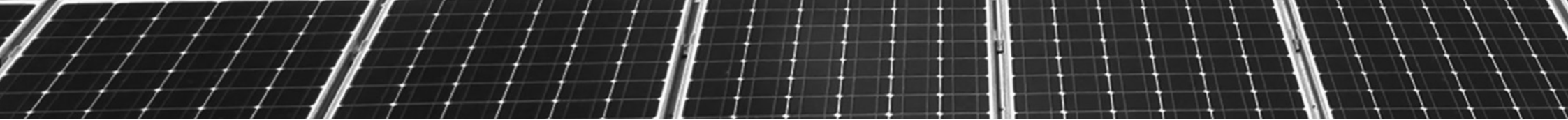
## AGM - S FEATURES

- Sealed construction
- New high-density active paste
- Heavy duty thick plates
- ABS case and cover
- Superior corrosion resistance
- Maintenance free, spill-proof/leak-proof
- Self regulating pressure release valves
- Low self discharge rate, only 3%/month
- 3 year warranty
- Faster recharging time

### ROLLS AGM TERMINAL CONFIGURATIONS

					
Post Terminal	DT (Dual Terminal)	LT (Lug Terminal)	M8 (Stud)	M8	TP08 (Brass Post)

Terminal Connections for AGM Series 5 & AGM Series 2 models.



## AGM - R

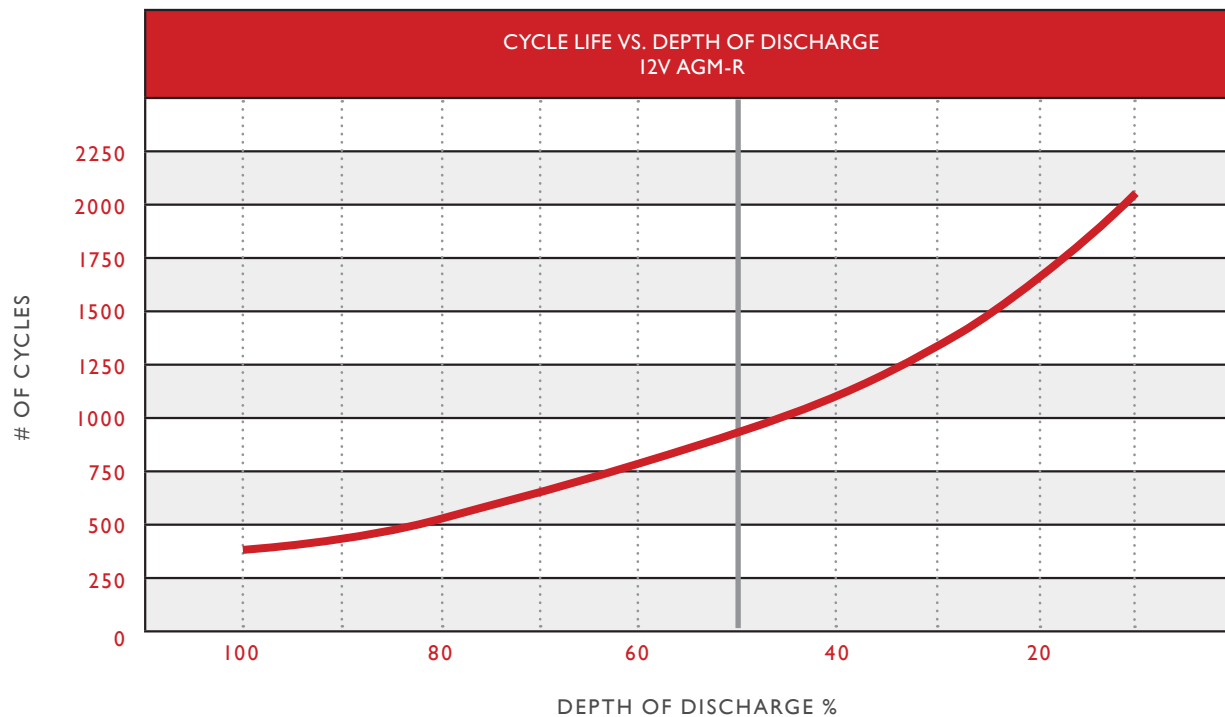
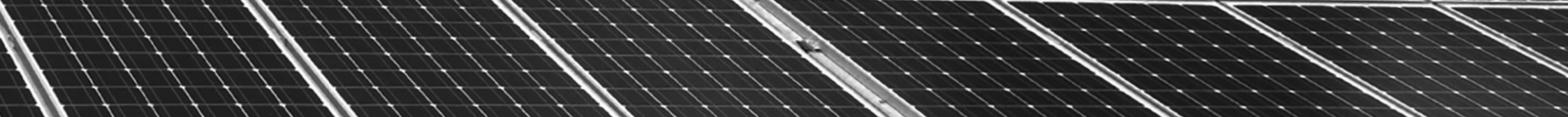
This range of dual purpose sealed maintenance-free 12 volt AGM batteries offering outstanding value and performance. The AGM-R line offers a lower self-discharge and an increased acceptance to charge current than conventional flooded wet batteries, allowing faster recharge. Incorporating all of the leading design features associated with Absorbed Glass Mat technology, the AGM-R line provides the perfect solution when looking to replace wet batteries or upgrade existing sealed batteries.

MODEL	VOLTAGE	10 HR RATE AH	20 HR RATE AH	100 HR RATE AH	TERMINAL TYPE	LENGTH MM	WIDTH MM	HEIGHT MM	WEIGHT KG
<b>ROLLS BATTERY AGM-R: 12 VOLT</b>									
R12-80AGM	12 V	73	80	90	DT	260mm	169mm	237mm	23kg
R12-100AGM	12 V	90	100	110	DT	306mm	169mm	237mm	27kg
R12-110AGM	12 V	90	110	120	DT	328mm	172mm	220mm	30kg
R12-200AGM	12 V	162	200	220	F8	522mm	240mm	224mm	60kg
R12-260AGM	12 V	200	260	290	F8	522mm	268mm	224mm	73kg

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process, battery components & electrolyte levels.







\*Cycle life may vary by application and is affected by frequency of cycling, operating temperature, depth of discharge (%DOD), adherence to manufacturer-recommended charging parameters and proper maintenance.



R12-100AGM

## AGM-R FEATURES

- Maintenance-free sealed construction
- Low internal resistance allowing faster recharge
- Shock and vibration-resistance ABS case
- 850 cycles at 50% DOD\*
- 1 year warranty
- Standard dimensions for easy retro-fit

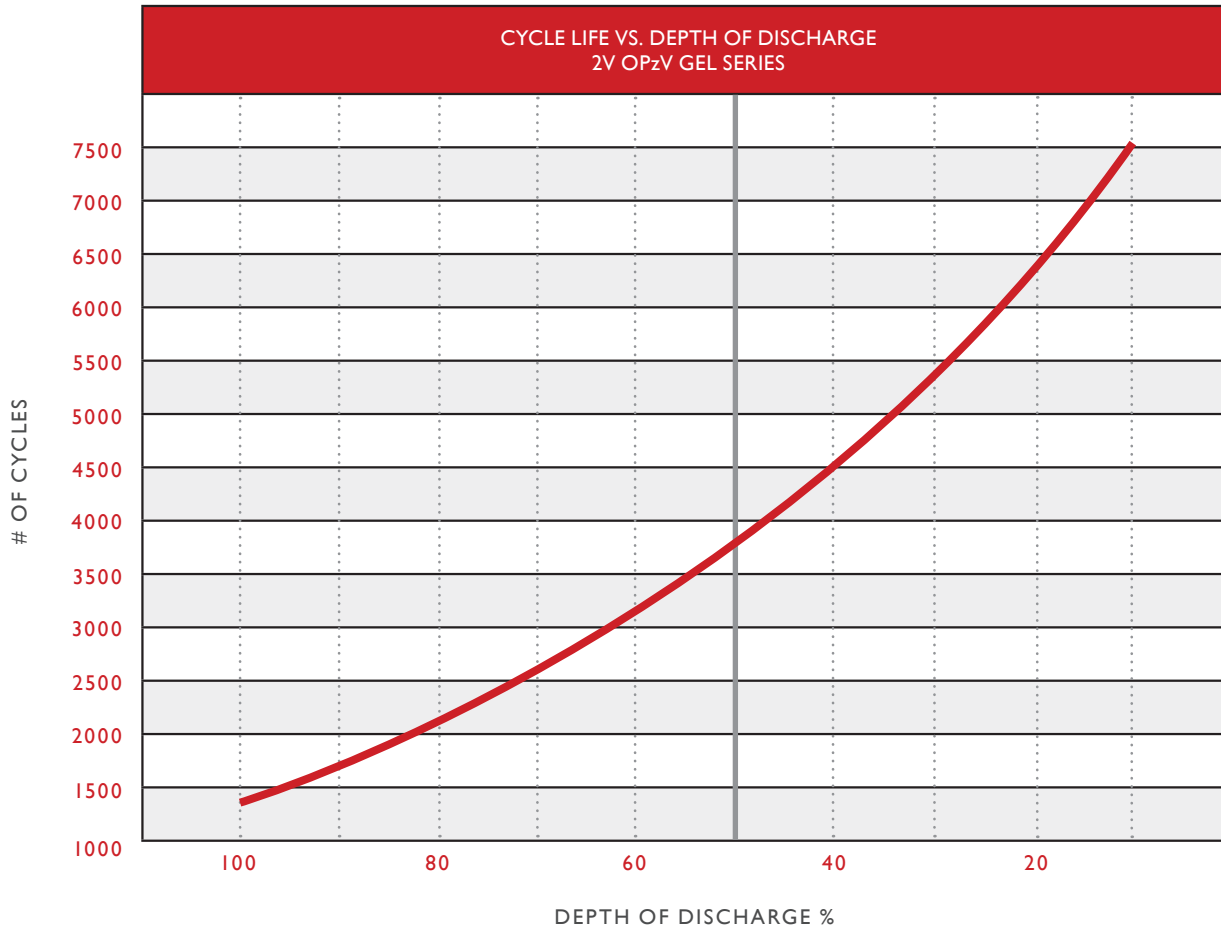
## GEL SERIES

Rolls GEL OPzV range offers an immobilized GEL and Tubular plate technology, providing high reliability and performance. Each is designed and manufactured according to DIN standards, constructed with die-casting positive grid and a patent formula of active material. Rolls GEL OPzV 2 volt models offers high cyclic use even under extreme operating conditions and more than 20 years floating design life at 25°C / 77°F.

MODEL	10 HR RATE AH	20 HR RATE AH	100 HR RATE AH	TERMINAL TYPE	LENGTH MM	WIDTH MM	HEIGHT (INCL. TERMINAL) MM	WEIGHT KG
<b>ROLLS BATTERY GEL: 2 VOLT</b>								
S2-224GEL	224	252	301	2 x Threaded Female M10	103mm	206mm	382mm	18.5kg
S2-280GEL	280	315	376	2 x Threaded Female M10	124mm	206mm	382mm	22kg
S2-336GEL	336	378	452	2 x Threaded Female M10	145mm	206mm	382mm	26.5kg
S2-405GEL	405	459	556	2 x Threaded Female M10	124mm	206mm	498mm	30kg
S2-486GEL	486	551	668	2 x Threaded Female M10	145mm	206mm	498mm	35kg
S2-567GEL	567	643	782	2 x Threaded Female M10	166mm	206mm	498mm	41kg
S2-690GEL	690	785	968	2 x Threaded Female M10	145mm	206mm	673mm	48kg
S2-920GEL	920	1046	1287	4 x Threaded Female M10	191mm	210mm	673mm	65.5kg
S2-1150GEL	1150	1308	1610	4 x Threaded Female M10	233mm	210mm	673mm	80kg
S2-1380GEL	1380	1571	1938	4 x Threaded Female M10	275mm	210mm	673mm	95kg
S2-1620GEL	1620	1828	2197	4 x Threaded Female M10	275mm	210mm	824mm	110kg
S2-2160GEL	2160	2437	2927	6 x Threaded Female M10	399mm	214mm	799mm	156kg
S2-2700GEL	2700	3044	3655	8 x Threaded Female M10	487mm	212mm	799mm	195kg
S2-3240GEL	3240	3660	4402	8 x Threaded Female M10	576mm	212mm	799mm	231kg
S2-3458GEL	3458	3936	4730	8 x Threaded Female M10	576mm	212mm	799mm	241.5kg

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process, battery components & electrolyte levels.

\*Rolls OPzV GEL models must be installed vertically unless otherwise specified. Models compatible with horizontal installation are available upon request. Please contact your Rolls Battery distributor or dealer for more information.

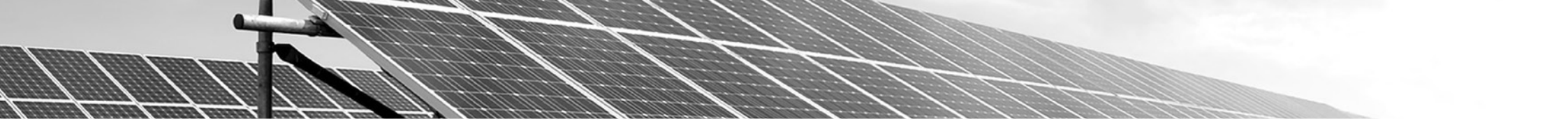


S2-450GEL

## GEL FEATURES

- Sealed maintenance-free construction
- Tubular plate technology for high cyclic use and float applications
- Durable ABS case
- Low self-discharge (less than 2% per month)
- Vertical or horizontal\* mounting / installation
- 3 year warranty
- Wide range of capacities & standard sizes

\* models compatible with horizontal installation are available by request. Contact your distributor or dealer for product information.



## INDUSTRY LEADING WARRANTY

Rolls deep cycle battery lines are backed with comprehensive, non-transferable warranties that lead the industry in length of coverage against manufacture defect. We're confident that our batteries will perform time after time, year after year. However, should a problem arise, you may be assured that you're covered better than any other battery warranty in the business.

WARRANTY TERMS			
BATTERY CATEGORY	SERIES	WARRANTY PERIOD	
RENEWABLE ENERGY	4000	36 MONTHS   3 YEARS	
	4500	48 MONTHS   4 YEARS	
	5000	60 MONTHS   5 YEARS	
LFP	R-SERIES	36 MONTHS   3 YEARS	
AGM	AGM-S	RENEWABLE ENERGY	36 MONTHS   3 YEARS
		MARINE & RV	24 MONTHS   2 YEARS
		OTHER APPLICATIONS	12 MONTHS   1 YEAR
	AGM-R	12 MONTHS   1 YEAR	
GEL	RE/MARINE STANDBY	36 MONTHS   3 YEARS	
	OTHER APPLICATIONS	12 MONTHS   1 YEAR	

For full warranty terms & conditions, visit [www.rolls-battery.com](http://www.rolls-battery.com)



## USED IN SYSTEMS AROUND THE WORLD

Manufactured in Springhill, Nova Scotia, Canada since 1959, Rolls deep cycle batteries are sold via distribution around the world. Manufactured for use in wide range of markets, Rolls batteries are chosen to provide dependable power in a wide range of Renewable Energy applications. From residential off-grid, grid-tied or backup power installs to large-scale applications such as diesel generator replacement in developing countries and island mini-grid systems such as those installed at the Scottish isles of Eigg, Muck, and Rum, as well as the Shetland island of Foula.

- Mini-grid systems Isle of Eigg, Muck & Rum, Scotland
- Shetland Isle of Foula, Scotland
- Sioma High School – Western Zambia
- Aloe D'Agafay Ecology Retreat, Marrakesh, Morocco



R12-300LFP



S2-1275AGM-RE



S2-1070GEL



2 YS 62P

**OUR CONTACT  
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**NOTES**

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