



# 2016 Battery Catalogue & Application Guide



*The true fit & forget battery*



[www.probebattery.co.za](http://www.probebattery.co.za)





## FEATURES AND BENEFITS

**Integrated Handle** Makes handling easy while retaining a low profile when not in use.

**Magic Eye** The battery equivalent of a fuel guage – indicating the state of charge of the battery.



**Built - in Flame Arrestor Filter**  
In addition to preventing sparks from entering the battery, a porous plug provides controlled airflow and pressure relief while reducing the risk of acid spillage.

**Breather** A small opening allows vented gases to escape while the double chamber lid contains electrolyte overflow.

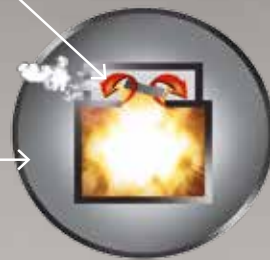
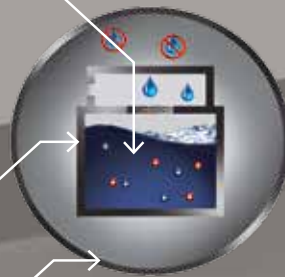
**Electrolyte** Expands and contracts under normal operating conditions and may emit hydrogen gas if overcharged.

**Double Chamber Lid** Limits discharge in the unlikely event of a battery malfunction.

**Vibration Resistant Polypropylene Outer Casing**  
Sealed to eliminate the need for maintenance. The vibration and chemical resistant casing is rigidised to prevent warping under extreme temperatures and pressures.

**Mounting Adaptors**  
To suit vehicle manufacturer's specifications.

**Specialised Multi - plate Cells**  
Probe batteries use calcium plates to reduce maintenance and prolong shelf and operational lifespan. Our calcium/calcium batteries take this to the extreme and glass mat and gel cater for specialised applications. Our range includes technical specifications to suit every application and budget.



## Table of Contents

<b>About Probe Battery .....</b>	<b>4 - 5</b>
<b>Probe Battery Series Information .....</b>	<b>8 - 9</b>
<b>Probe Battery Specifications .....</b>	<b>10 - 11</b>
<b>Warranty .....</b>	<b>12 - 13</b>

**JOHANNESBURG (HO)**  
Tel: 0861 113 507 (Local)  
Tel: +27(0)11 453 0924 (International)  
Fax: +27(0)11 453 2141  
Cell: 082 440 0577

**CAPE TOWN**  
Tel: +27(0)21 981 9287  
Fax: +27(0)21 982 7355  
Cell: 082 741 9864

**EASTERN CAPE**  
Tel: +27(0)41 374 4343  
Fax: +27(0)41 374 4338  
Cell: 082 741 9864

**DURBAN**  
Tel: +27(0)31 705 6050  
Fax: +27(0)31 705 5834  
Cell: 076 728 4509

**WITBANK**  
Tel: +27(0)13 697 0660  
Tel: +27(0)13 692 4161  
Fax: +27(0)13 692 3337  
Cell: 082 901 1206

**BLOEMFONTEIN**  
Tel: +27(0)51 430 8722  
Fax: +27(0)51 430 8723  
Cell: 083 262 0779



## ABOUT PROBE

- Established in 1963
- Main focus was Auto Electrical Services which has now been expanded to batteries, starters, alternators and auto electrical components, automotive safety lighting, engine cooling fans including viscous fan clutches, LED tail and work lights, CCTV for trucks and earthmoving equipment.
- We are Direct Importers, Wholesalers & Distributors of our products, as well as offering an Added Value Support - Repair / Reman facility, technical sales support and training, as well as assistance with implementation of preventative maintenance programs.
- Probe a leader in it's field with over 50 years experience.
- Probe has been appointed distributors and aftermarket support for many international brands - Delco Remy, Prestolite / Leece Neville, C.E. Niehoff, Aristo, Horton, Kysor, SM Power Battery Chargers & various auto electrical components.
- Exclusive distribution agreements: Tudor Batteries (Brazil), Zap Batteries (Poland), Roadvision, Hammerhead / Great White Lights
- Other significant product representations: Million Tape, Cole Hersee, Menbers, Transpo regulators.
- Probe in 2014 - Probe purchased the MED and Aristo brands a prominent electrical automotive brand in the Western & Eastern Cape.
- Probe in 2015 - Probe acquired Dynamax Auto Components (DAC) stock and equipment to expand it's activities in the Gauteng and North Region and to enable to assemble rotating electrics in RSA.



## ABOUT PROBE

### OUR VISION

- To Become a Company of choice for trucking fleets, mines, OEM, auto electricians, spare shops and battery fitment centres with regard to their rotating auto electrical and battery requirements.
- To offer the market a quality product with an acceptable warranty, at competitive pricing with sound technical support combined with consistent service.
- To be rated by our customers as the best company in our field in South Africa.

### BRANCHES

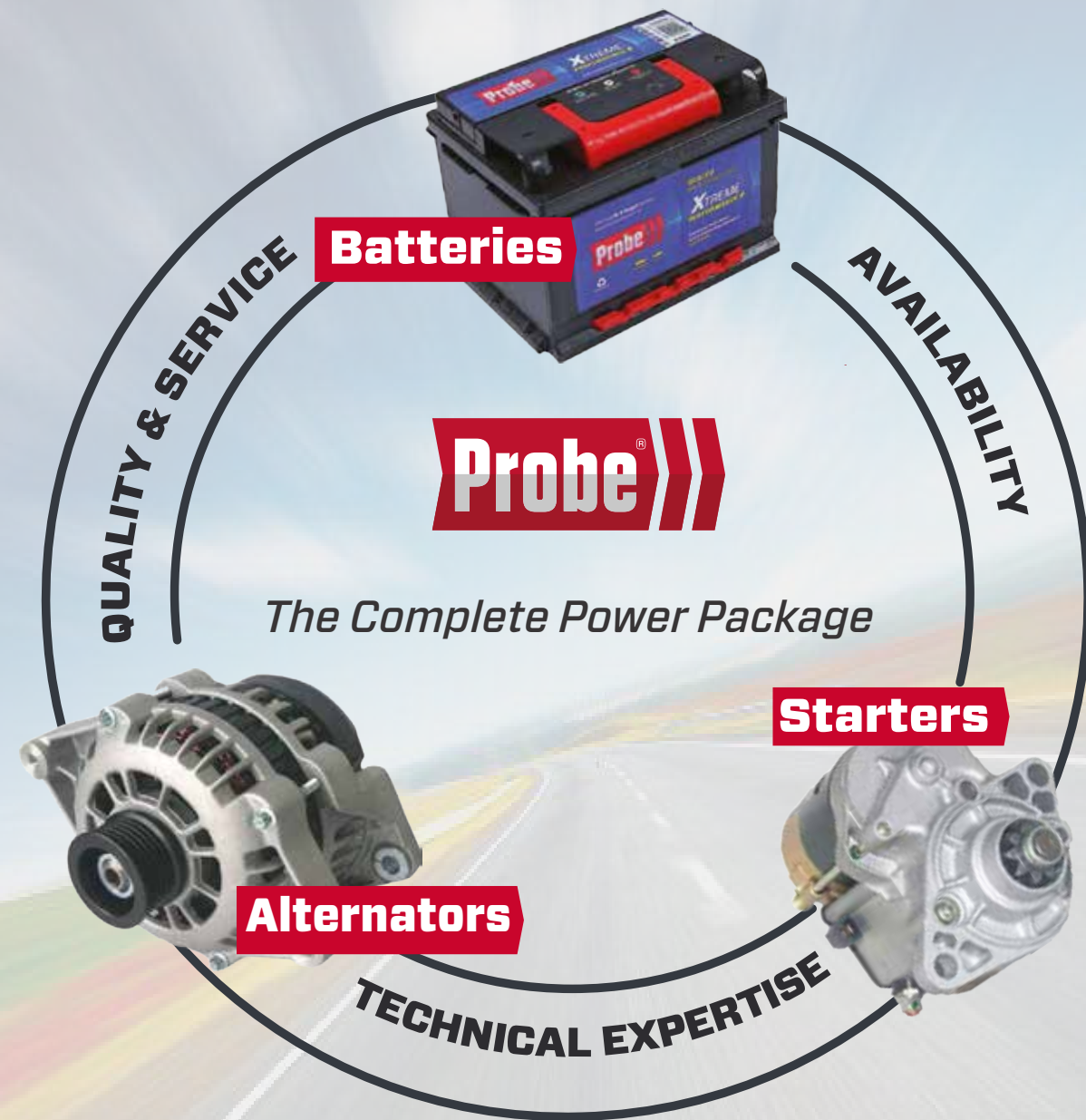
- Probe has a national branch network with branches in Main Centres:
  - Johannesburg
  - Durban
  - Cape Town
  - Port Elizabeth
  - Bloemfontein,
- Mining division have operations in:
  - Witbank
  - Rustenburg
  - Kuruman
  - Tete in Mozambique







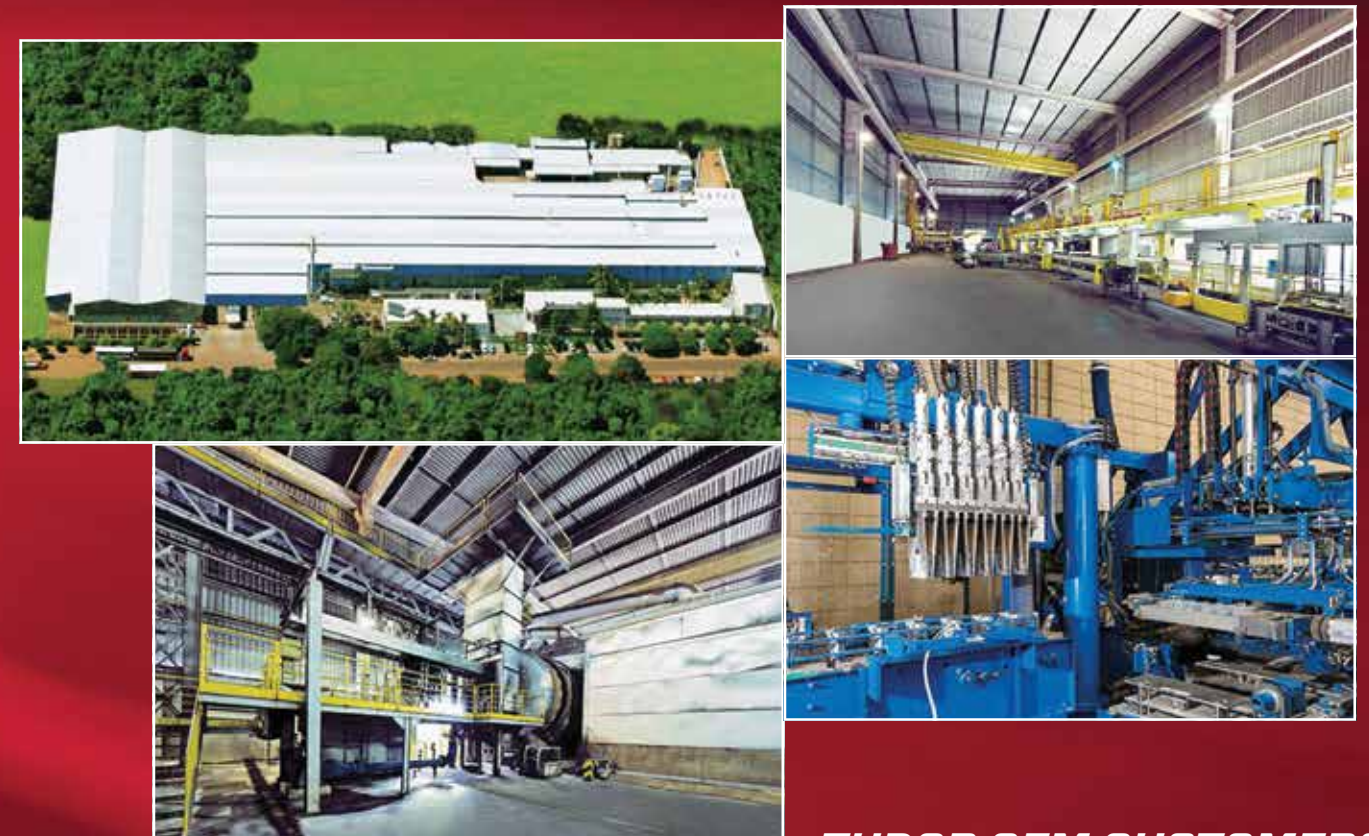
www.probegroup.co.za  
www.probebattery.co.za  
electrolg



## TUDOR MANUFACTURING PLANT

The plant is located in Bauru, in the state of Sao Paulo, Brazil.

The most modern battery manufacturers in Latin America with high technology and state-of-the-art automation imported from qualified suppliers from England, Germany and Italy, including grid lamination, continuous lines for expansion and pasting of positive and negative plates, computerized curing chambers, automated assembly lines and equipment for formation and finishing line according to international standards.



**TUDOR OEM CUSTOMERS**



**CUSTOMERS UNDER DEVELOPMENT**





**Sealed maintenance - free** series with **calcium/calcium technology** offers extended battery life.

The Probe Performance Plus XHD battery has increased grid strength and internal plate supports making it **vibration resistant, extremely durable and robust. A unique state - of - charge indicator (Magic Eye)** allows you to easily check the power status of your battery.

The fully - sealed characteristics do not allow any access to the battery, making it totally maintenance free.

**PERFORMANCE+**  
AUTOMOTIVE  
BATTERIES

**24**  
MONTH  
WARRANTY



**SUPREME**  
AUTOMOTIVE  
BATTERIES

**36**  
MONTH  
WARRANTY



**PERFORMANCE**  
TRUCK  
BATTERIES

**12/24**  
MONTH  
WARRANTY



**PLUS XHD**  
HEAVY DUTY  
BATTERIES

**12/24**  
MONTH  
WARRANTY



**MULTIPURPOSE**  
RECREATIONAL  
BATTERIES

**12**  
MONTH  
WARRANTY



**DEEP CYCLE**  
AGM/GEL/  
LEAD CALCIUM

**12**  
MONTH  
WARRANTY














Since 1963, we have dedicated ourselves to bring you our complete range of batteries. Probe has a battery for every application at every price point – all supported by our national footprint with standard and extended warranties. Our batteries are exclusively manufactured for Probe in Brazil and Europe to meet OEM and international standards:



Probe Battery Specifications

SABMA NUMBER	BATTERY TYPE	PLATE TYPE	CAPACITIES*			DIMENSIONS MM	TOTAL HEIGHT	HANDLE	POST TYPE	TERMINAL POLARITY	BASE TYPE
			Ah	CCA	RC	L x W x H	MM				
XTREME SERIES : AUTOMOTIVE BATTERIES - PERFORMANCE AND PERFORMANCE +											
610P	SMF	WET - CALCIUM	45	350	65	253 x 176 x 185	205	Yes	A	1	B6
611P	SMF	WET - CALCIUM	45	350	65	253 x 176 x 185	205	Yes	A	2	B6
612F	MF	WET - CALCIUM	45	350	65	253 x 176 x 185	205	Yes	A	2	B6
612P	SMF	WET - CALCIUM	44	350	62	207 x 175 x 190	190	Yes	A	2	B6
615F	MF	WET - CALCIUM	40	260	45	196 x 130 x 220	225	Yes	B	1	B1
615P	SMF	WET - CALCIUM	36	260	45	196 x 130 x 225	225	Yes	B	1	B1
616F	MF	WET - CALCIUM	40	260	45	196 x 130 x 225	225	Yes	B	2	B1
616P	SMF	WET - CALCIUM	36	260	45	196 x 130 x 225	225	Yes	B	2	B1
618F	MF	WET - CALCIUM	38	320	60	205 x 175 x 175	175	Yes	A	2	B3
618P	SMF	WET - CALCIUM	38	300	60	207 x 175 x 175	175	Yes	A	2	B3
621P	SMF	WET - CALCIUM	50	400	75	253 x 176 x 185	205	Yes	A	2	B6
622P	SMF	WET - CALCIUM	50	400	75	253 x 176 x 185	205	Yes	A	1	B6
628F	MF	WET - CALCIUM	55	500	88	242 x 175 x 175	175	Yes	A	2	B3
628P	SMF	WET - CALCIUM	45	350	65	242 x 175 x 175	175	Yes	A	2	B3
630P	SMF	WET - CALCIUM	40	330	52	237 x 128 x 185	205	Yes	A	1	B3
631P	SMF	WET - CALCIUM	40	330	52	237 x 128 x 185	205	Yes	A	2	B3
634P	SMF	WET - CALCIUM	40	330	52	237 x 128 x 185	205	Yes	A	1	B6
635F	MF	WET - CALCIUM	55	500	88	242 x 175 x 175	175	Yes	A	2	B3
635P	SMF	WET - CALCIUM	45	350	65	242 x 175 x 175	175	Yes	A	1	B3
636P	SMF	WET - CALCIUM	45	330	52	237 x 130 x 225	225	Yes	A	2	B6
637F	MF	WET - CALCIUM	62	550	99	242 x 175 x 190	190	Yes	A	1	B3
637P	SMF	WET - CALCIUM	62	500	100	242 x 175 x 190	190	Yes	A	1	B3
638P	SMF	WET - CALCIUM	60	450	75	253 x 176 x 185	205	Yes	A	1	B6
638PS	MF	WET - CALCIUM	65	520	85	253 x 176 x 193	214	Yes	A	1	B6
639P	SMF	WET - CALCIUM	60	500	75	253 x 176 x 185	205	Yes	A	2	B6
639PS	MF	WET - CALCIUM	65	520	85	256 x 176 x 193	214	Yes	A	2	B6
643F	MF	WET - CALCIUM	62	550	99	242 x 175 x 190	190	Yes	A	1	B3
643P	SMF	WET - CALCIUM	55	450	90	242 x 175 x 190	190	Yes	A	1	B6
645P	SMF	WET - CALCIUM	62	500	100	242 x 175 x 190	190	Yes	A	1	B3
646F	MF	WET - CALCIUM	62	550	99	242 x 175 x 190	190	Yes	A	2	B3
646P	SMF	WET - CALCIUM	55	450	90	242 x 175 x 190	190	Yes	A	2	B3
647F	MF	WET - CALCIUM	60	550	96	242 x 175 x 175	175	Yes	A	2	B3
647P	SMF	WET - CALCIUM	54	450	90	242 x 175 x 175	175	Yes	A	2	B3
649P	SMF	WET - CALCIUM	65	520	85	253 x 176 x 193	214	Yes	A	1	B6
650P	SMF	WET - CALCIUM	70	500	150	305 x 173 x 206	226	Yes	A	1	B5
650PS	MF	WET - CALCIUM	80	600	128	303 x 175 x 200	220	Yes	A	1	B3
651F	MF	WET - CALCIUM	65	700	105	275 x 175 x 175	175	Yes	A	2	B3
651P	SMF	WET - CALCIUM	65	520	110	277 x 175 x 175	175	Yes	A	2	B3
652F	MF	WET - CALCIUM	70	650	112	275 x 175 x 190	190	Yes	A	2	B3
652P	SMF	WET - CALCIUM	66	550	110	277 x 175 x 190	190	Yes	A	2	B3
652PS	SMF	WET - CALCIUM	75	620	125	277 x 175 x 190	190	Yes	A	2	B3
653F	MF	WET - CALCIUM	74	620	125	277 x 175 x 190	190	Yes	A	1	B3
653P	SMF	WET - CALCIUM	75	620	125	277 x 175 x 190	190	Yes	A	1	B3
654F	MF	WET - CALCIUM	80	770	128	313 x 175 x 175	175	Yes	A	2	B3
654P	SMF	WET - CALCIUM	75	630	120	286 x 175 x 175	190	Yes	A	2	B3
657F	MF	WET - CALCIUM	70	650	112	275 x 175 x 190	190	Yes	A	1	B3
657P	SMF	WET - CALCIUM	66	550	110	277 x 175 x 190	190	Yes	A	1	B3
657PS	SMF	WET - CALCIUM	75	620	125	277 x 175 x 190	190	Yes	A	1	B3
658F	MF	WET - CALCIUM	100	800	160	352 x 175 x 190	190	Yes	A	2	B3
658P	SMF	WET - CALCIUM	90	700	160	352 x 175 x 190	190	Yes	A	2	B3
659F	MF	WET - CALCIUM	100	700	170	352 x 175 x 190	190	Yes	A	1	B3
659P	SMF	WET - CALCIUM	95	700	170	352 x 175 x 190	190	Yes	A	1	B3
663F	MF	WET - CALCIUM	92	700	170	352 x 175 x 190	190	Yes	A	2	B3
663P	SMF	WET - CALCIUM	95	700	170	352 x 175 x 190	190	Yes	A	2	B3
668F	MF	WET - CALCIUM	85	770	140	315 x 175 x 190	190	Yes	A	2	B3
668P	SMF	WET - CALCIUM	80	650	140	315 x 175 x 190	190	Yes	A	2	B3
669F	MF	WET - CALCIUM	85	770	140	315 x 175 x 190	190	Yes	A	1	B3
669P	SMF	WET - CALCIUM	80	650	140	315 x 175 x 190	190	Yes	A	1	B3
671PE	SMF	WET - CALCIUM	90	700	160	305 x 173 x 206	226	Yes	A	1	B5
674PE	SMF	WET - CALCIUM	90	700	160	305 x 173 x 206	226	Yes	A	2	B5

SABMA NUMBER	BATTERY TYPE	PLATE TYPE	CAPACITIES*			DIMENSIONS MM	TOTAL HEIGHT	HANDLE	POST TYPE	TERMINAL POLARITY	BASE TYPE
			Ah	CCA	RC	L x W x H	MM				
SUPREME SERIES: AUTOMOTIVE BATTERIES											
652AGM	SMF	AGM	70	640	115	275 X 175 X 190	190	Yes	A	2	-
658AGM	SMF	AGM	95	780	165	352 x 175 x 190	190	Yes	A	2	-
XTREME SERIES: TRUCK BATTERIES - PERFORMANCE											
671P	MF	WET - CALCIUM	100	750	160	305 x 173 x 206	220	Yes	A	1	B5
674P	MF	WET - CALCIUM	100	750	160	305 x 175 x 206	220	Yes	A	2	B5
1251	SMF	WET - CALCIUM	100	700	170	331 x 173 x 220	240	Yes	A	C	-
1250	SMF	WET - CALCIUM	100	700	170	331 x 173 x 220	240	Yes	SCREW	C	-
1250	SMF	WET - CALCIUM	100	700	170	331 x 173 x 220	240	Yes	SCREW	C	-
SN100L	SMF	WET - CALCIUM	100	800	182	408 x 170 x 208	228	Yes	A	2	-
682P	MF	WET - CALCIUM	125	760	200	513 x 178 x 195	220	Yes	A	5	-
683P	MF	WET - CALCIUM	125	760	200	513 x 178 x 195	220	Yes	A	4	-
689P	MF	WET - CALCIUM	143	1000	228	513 x 210 x 195	220	Yes	A	4	-
690P	MF	WET - CALCIUM	143	1000	228	513 x 210 x 195	220	Yes	A	5	-
692P	MF	WET - CALCIUM	170	1000	272	513 x 210 x 195	220	Yes	A	4	-
696P	MF	WET - CALCIUM	180	1050	288	513 x 210 x 195	220	Yes	A	4	-
698P	MF	WET - CALCIUM	180	1050	288	513 x 210 x 195	220	Yes	A	5	-
688P	MF	WET - CALCIUM	200	1150	320	518 x 264 x 215	243	Yes	A	5	-
XTREME SERIES: XTRA HEAVY DUTY BATTERIES - PERFORMANCE +											
671PS	SMF	WET - CALCIUM	95	700	160	331 x 173 x 220	243	Yes	A	C	-
674PS	SMF	WET - CALCIUM	95	700	160	331 x 173 x 220	243	Yes	A	C	-
1150P	SMF	WET - CALCIUM	100	700	170	331 x 173 x 220	243	Yes	SCREW	C	-
1151P	SMF	WET - CALCIUM	100	700	170	331 x 173 x 220	243	Yes	A	C	-
1150PS	SMF	WET - CALCIUM	105	750	180	331 x 173 x 220	243	Yes	SCREW	C	-
1151PS	SMF	WET - CALCIUM	105	750	180	331 x 173 x 220	243	Yes	A	C	-
31 - 1000CT	SMF	WET - CALCIUM	110	800	190	331 x 173 x 220	243	Yes	SCREW	C	-
31 - 1001CT	SMF	WET - CALCIUM	110	800	190	331 x 173 x 220	243	Yes	A	C	-
682PS	SMF	WET - CALCIUM	120	850	200	505 x 180 x 195	218	Yes	A	5	-
683PS	SMF	WET - CALCIUM	120	850	200	505 x 180 x 195	218	Yes	A	4	-
685PS	SMF	WET - CALCIUM	120	800	200	505 x 180 x 195	218	Yes	A	4	-
689PS	SMF	WET - CALCIUM	135	920	280	510 x 215 x 210	232	Yes	A	4	-
690PS	SMF	WET - CALCIUM	135	920	280	510 x 215 x 210	232	Yes	A	5	-
692PS	SMF	WET - CALCIUM	150	1000	350	510 x 215 x 210	232	Yes	A	4	-
696PS	SMF	WET - CALCIUM	180	1000	350	510 x 215 x 210	232	Yes	A	4	-
698PS	SMF	WET - CALCIUM	180	1000	350	510 x 215 x 210	232	Yes	A	5	-
688PS	SMF	WET - CALCIUM	200	1100	400	512 x 275 x 210	249	Yes	A	5	-
688SD	SMF	WET - CALCIUM	220	1200	420	512 x 275 x 210	249	Yes	A	5	-
XTREME SERIES: MULTIPURPOSE BATTERIES											
M24PMF	SMF	WET - CALCIUM	75	650	140	260 x 173 x 205	226	Yes	DUAL	1	-
M27PMF	SMF	WET - CALCIUM	90	700	150	305 x 173 x 205	226	Yes	DUAL	1	-
M31PMF	SMF	WET - CALCIUM	110	800	210	331 x 173 x 240	240	Yes	DUAL	2	-
1150HC	SMF	WET - CALCIUM	102	800	190	331 x 173 x 220	240	Yes	SCREW	C	-
XTX20 JETSKI	MF	WET - CALCIUM	18	260	23	171 x 85 x 152	153	Yes	-	-	-
XTX30 JETSKI	MF	WET - CALCIUM	28	280	35	168 x 127 x 177	128	Yes	-	-	-
XTREME SERIES: DEEP CYCLE BATTERIES : WET - GEL - VRLA AGM											
12TE105	SMF	WET	105			331 x 173 x 245	240	Yes	SCREW	C	-
12TE220	SMF	WET	220			515 x 275 x 205	265	Yes	SCREW	C	-
12GEL100	SMF	GEL	105			330 x 175 x 225	225	Yes	RT	-	-
12GEL200	SMF	GEL	220			522 x 240 x 235	235	Yes	RT	-	-
12AGM7.2	SMF	AGM	7.2			151 x 65 x 99	99	-	Male type	-	-
12AGM100	SMF	AGM	105			330 x 172 x 215	215	Yes	SCREW	-	-

BATTERY TYPE									
	AUTOMOTIVE	BUSES	OFF ROAD/ EARTH MOVING	ON ROAD TRUCKS	BOAT	CARAVAN	REPEATER STATION BACKUP	EMERGENCY LIGHTS	SOLAR PANEL BACKUP
XTREME SERIES - Performance	24 Month Warranty	24 Month Warranty	12 Month Warranty	24 Month Warranty	24 Month Warranty				
XTREME SERIES - Performance +	24 Month Warranty	24 Month Warranty			24 Month Warranty				
XTREME SERIES - Plus XHD	24 Month Warranty	24 Month Warranty	12 Month Warranty	24 Month Warranty	24 Month Warranty				
MULTIPURPOSE Recreational Batteries	12 Month Warranty				12 Month Warranty	12 Month Warranty	12 Month Warranty	12 Month Warranty	
DEEP CYCLE - AGM/Gel/Lead Calcium					12 Month Warranty	12 Month Warranty	12 Month Warranty	12 Month Warranty	12 Month Warranty
SUPREME SERIES	36 Month Warranty				36 Month Warranty				

STEP 1: VISUAL INSPECTION (Batteries with a Magic Eye)

\* If the battery does not have a magic eye, please go to step 2

- All Probe Batteries will either have a Serialised Warranty Card attached to the battery, which corresponds to an engraved serial number > the battery or a Serial Label > the casing of the battery. In addition each battery will be DATE STAMPED when sold.
  - The above warranty periods will >ly be applicable from DATE STAMP PC15 >wards. Any product prior to this DATE STAMP, code PC15, will be honoured under the previous warranty period's requirements.
  - If there is NO SERIAL ENGRAVING OR LABEL > the battery, but the battery has a DATE STAMP, for example PD12 (P = Probe, D = Month of purchase – April, 12 = Year), then the DATE STAMP date applies.
  - If there is NO SERIAL ENGRAVING OR LABEL > the battery or the SERIAL ENGRAVING OR LABEL has been tampered with and there is no DATE STAMP > the battery or the DATE STAMP has been tampered with, then NO WARRANTY APPLIES.
  - Check the casing, terminals and state - of - charge indicator (Magic Eye) for obvious damage, tampering or abuse. There will be NO WARRANTY if the casing is damaged, swollen (indicating overcharge conditions), terminal abused or arced and Magic Eye has been removed or tampered with.
  - Check COLOUR of Magic Eye after shaking the battery in order to mix electrolyte (be aware of the different types depending > models, but procedure remains the same). If the Magic Eye indicates OVERCHARGED then NO WARRANTY APPLIES.
  - Check COLOUR of Magic Eye after shaking the battery in order to mix electrolyte (be aware of the different types depending > models – but procedure remains the same). If the Magic Eye indicates RE - CHARGE then NO WARRANTY APPLIES and proper charging procedures should be adopted (see step 4)
  - If battery Magic Eye does not display any of the above conditions follow the guidelines in STEP 2 and STEP 3 and thereafter STEP 4 should be followed.
- Use Magic Eye to confirm results of possible claim:
- If Magic Eye is GREEN and open circuit voltage less than 12.1V and after charge battery remains below capacity then the battery is FAULTY (DEAD CELL), REPLACE UNDER WARRANTY.
  - If Magic Eye is WHITE/RED/BLACK, follow instructions > battery label.
  - If Magic Eye shows CHARGE, battery is GOOD and needs a charge and must be re - tested after charge.
  - If Magic Eye turns GREEN and battery open circuit voltage is greater than 12.5V, then NO WARRANTY applies and return battery into service or to customer.
  - If Magic Eye shows OVERCHARGED, battery has been overcharged due to alternator irregularities, malfunction problems, exposure to excessive heat or possible thermal run away – NO WARRANTY applies. Check that Alternator is charging within specification.

- If the Magic Eye is GREEN/BLACK/WHITE and shows RECHARGE, proceed to recharge. If after recharge, the open circuit voltage does not recover and remains below 12V, this means that there is possibly a dead cell or open circuit in which case, the WARRANTY APPLIES provided the first date of purchase is stamped > the new battery and proof of purchase is provided.

STEP 3: ELECTRONIC TESTER USER GUIDELINE

There are various models of Electronic Testers available. Be aware of CCA settings – SAE/BCI, IEC, DIN and EN. Probe Batteries label ratings are SAE/BCI standards.

- Connect tester clamps to battery terminals. Connection directly >to Stud Type Stainless Steel Terminals or Dirty Terminals or Terminals with Grease/corrosion or Altered Terminals will impair readings. Good connection to lead part of posts is essential to achieve accurate results.
- Set CCA ratings – select SAE/BCI setting and follows election instructions.
- The tester results and Magic Eye status after re - charging need to be collated and asseAGment made regarding warranty authenticity.

STEP 4: PROBE BATTERY WARRANTY CLAIM

- After following STEP 1, 2 and 3 and the battery appears to be subject to a possible claim, complete the Probe Battery Warranty Claim Request form and return to Probe or Accredited Dealer for testing of battery and possible approval of warranty replacement.

THIS WARRANTY IS VOID IF FAILURE HAS RESULTED FROM ANY OF THE BELOW:

- Abuse/Misuse**  
Cracked casings, damaged terminals among others
- Neglect/Excessive discharge**  
Evident in premature plate distortion and/or plate paste deterioration
- Improper Charging**  
Evident in premature plate distortion and/or plate paste deterioration
- Defective/Irregular Charging Voltage Regulation, Improper Use/Misapplication**  
Including incorrect over or under charging or accident
- Failure To keep the battery properly charged or maintained**  
Evident in plate sulphation
- Cycling at depths of discharge in excess of 20% of nominal capacity of the battery for more than 365 cycles**  
Operating the battery below 0°C or above 35°C; or use in automotive vehicles or equipment without proper operating, starting or charging systems; use of the Battery in continuous shift; overheating; overfilling; tipping over; missing or loose vent caps or visual “state - of - charge” indicators or lids/vent cap covers, if applicable; use of battery acid additives; excessive use and abnormal wear and tear during the Warranty Term (including commercial and industrial use)
- Use in a vehicle or equipment fitted with additional or non standard/factory fitted electrical extras**  
For example alarms, immobilisers, tracking devices, air conditioners, radios and any other electronic/electrical devices)
- Environmental conditions or any other damage arising from:**  
Inter alia, Environmental conditions or any other damage arising inter alia, accident/collision, fire, extreme heat, explosion, freezing, theft, civil commotion, labour/political unrest or rioting, Acts of God, government wars, embargoes or shortages or delays/damages or loss during transit or where PROBE CORPORATION reasonably determines that the Battery has been repaired or altered
- Explosion**  
Application of an over voltage for a long period of time (even if the charging current is minimal) causes a loss of water in the electrolyte by disassociating the water of the electrolyte into hydrogen and oxygen gases which escape into the atmosphere with eventual drying up and/ or overheating of the battery with serious damaging effects. In this regard, loss of electrolyte due to either overcharging, age of the battery, tipping over or overheating thereof, will create an excess of free explosive gas in the battery chamber and obvious eventual exposure of the plates and internal connections to the gas. In such a case, should the battery be subjected to delivery of energy, i.e. flow of current, an explosion will be generated with consequential internal and external damage, even if a minimal spark generated occurs in the exposed parts of the plates and internal connectors. Consequently No Warranty applies in such as case.

STEP 2: ELECTRICAL BATTERY TEST

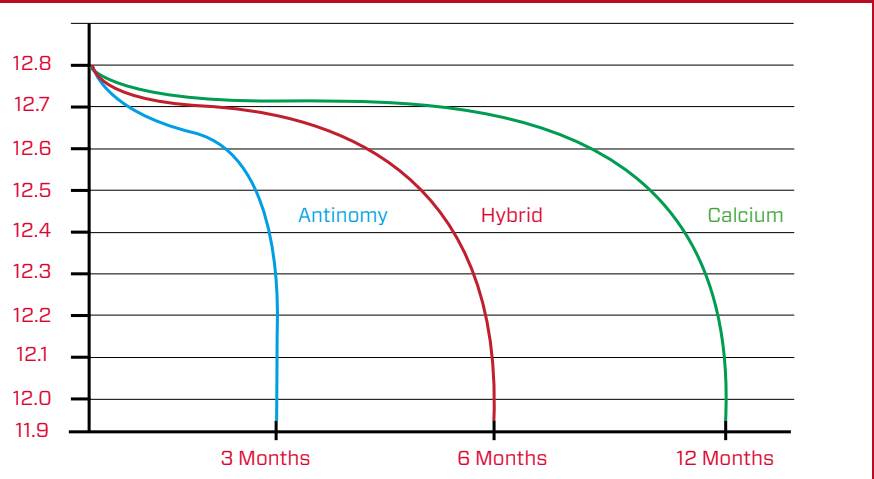
Use a suitable ELECTRONIC TESTER to test the battery to confirm results relating to a possible warranty claim:

- If the Magic Eye is GREEN and the open circuit voltage between 12.1V and 12.5V, then battery is GOOD and needs a charge. After charge, test again and if GOOD return into service.
- If the Magic Eye is BLACK/WHITE and shows RECHARGE and the open circuit voltage is below 12.1V, proceed to recharge. If after recharge the open circuit voltage recovers over 12.5V and the CCA reading is lower than battery specifications, this would indicate that the battery has been over - used and/or deeply discharged. Such CCA deficit is a typical indication of the state of health of the battery whereby the battery has been kept in a deeply discharged state for an extended period of time causing sulphation of the battery plates. This condition is normally irreversible. NO WARRANTY applies.
- If the Magic Eye is GREEN and the open circuit voltage between 12.1V and 12.5V, then battery needs a charge. If after recharge, the CCA readings are lower than battery specifications then the WARRANTY APPLIES, subject to the first date of purchase being stamped > the new battery and proof of purchase is provided.

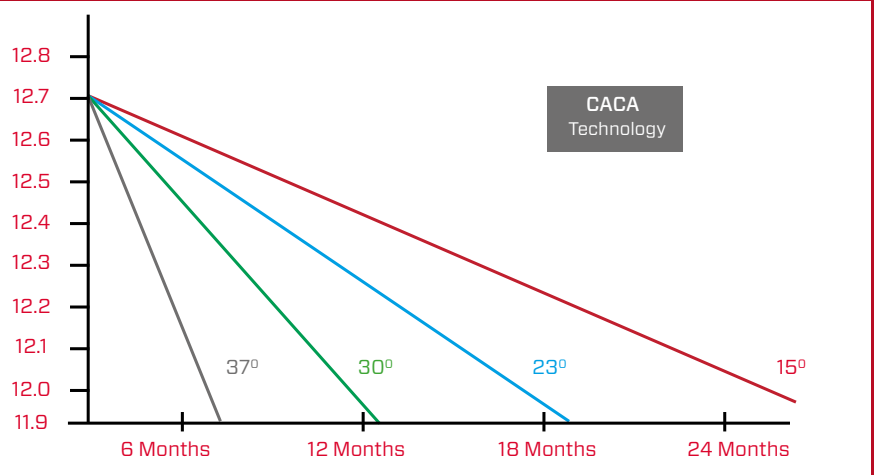
Battery Performance

Probe batteries calcium plates offer a longer shelf life due to low shelf discharge rates.

DISCHARGE



TEMPERATURE DISCHARGE





# New Addition: Available 2016



#### JOHANNESBURG (HQ)

Tel: 0861 113 507  
Tel: (Local)  
+27(0)11 453 0924  
Fax: +27(0)11 453 2141

#### CAPE TOWN

Tel: +27(0)21 981 9287  
Fax: +27(0)21 982 7355  
Cell: 082 741 9864

#### EASTERN CAPE

Tel: +27(0)41 374 4343  
Fax: +27(0)41 374 4338  
Cell: 082 741 9864

#### DURBAN

Tel: +27(0)31 705 6050  
Fax: +27(0)31 705 5834  
Cell: 076 728 4509

#### WITBANK

Tel: +27(0)13 697 0660  
Tel: +27(0)13 692 4161  
Fax: +27(0)13 692 3337  
Cell: 082 901 1206

#### BLOEMFONTEIN

Tel: +27(0)51 430 8722  
Fax: +27(0)51 430 8723  
Cell: 083 262 0779



AVAILABLE COUNTRYWIDE

[www.probegrup.co.za](http://www.probegrup.co.za) | [www.probebattery.co.za](http://www.probebattery.co.za)