



MAXEN

AUTOMOTIVE BATTERIES / DEEP CYCLE BATTERIES





Since its inception in 1941, Hankook Tire & Technology has grown into a global leader paving the way for the global tire industry through daring challenges and astonishing innovations. We will continue to take a step forward as a global top-tier company leading the way for the future automotive industry by further reinforcing our world-renowned premium brands and high-tech leadership, and actively practicing ESG management designed to fulfill our corporate social responsibilities.



 **Hankook**
batteries

Automotive UHPB

Premium Starter | Ultra high performance battery Tech.



HANKOOK UHPB (Ultra High Performance Battery) Series is specially designed for better performance with longer life and more power to endure extreme driving condition and reliable quality to meet premium automotive technology.

Core Technology

- X-Frame plus
- Ca/Ca
- Carbon plus
- Heat sealed lid

Benefits

- 30% enhanced starting power
- Fast and powerful start with X-Frame Technology
- Enduring and consistent power performance with High Durability Tech.
- The carbon plus technology reduces the charging time

Automotive SMF

Reliable Starter | Sealed maintenance free battery Tech.



HANKOOK SMF Battery is the ideal choice for standard vehicles with usual power demands. It's maintenance free and it provides reliable power support for all applications. HANKOOK offers a complete range of SMF Batteries for all of European, Asian and American vehicles.

Core Technology

- X-Frame plus
- Ca/Ca
- Sealed Double Lid
- Nonwoven Tissue

Benefits

- Reliable starting power with X-Frame Technology
- High Durability Technology delivers longer service life
- A complete range offered for 99% of vehicles on the market

12V AUTOMOTIVE

HANKOOK UPHB

GR NO.	TYPE NO.	CAPACITY	CCA (SAE)	DIMENSION (mm)				LAYOUT	TERMINAL	HOLD-DOWN
				L	W	H	TH			
B24	UMF75B24LS	55	500	234	127	200	220	0	A	B0(B1)
D26	UMF115D26L	85	750	257	172	200	220	0	A	B0(B1)
D31	UMF135D31L	85	850	302	172	200	220	0	A	B0(B1)
LB3	UMF57400	74	750	277	174	175	175	0	A	B13

HANKOOK SMF

GR NO.	TYPE NO.	CAPACITY	CCA (SAE)	DIMENSION (mm)				LAYOUT	TERMINAL	HOLD-DOWN
				L	W	H	TH			
B19	MF40B19L	35	330	187	127	200	220	0	B	B0
B24	MF50B24L	45	400	234	127	200	220	0	B	B0
B24	MF50B24R	45	400	234	127	200	220	1	B	B0
D23	MF55D23L	60	550	230	172	200	220	0	A	B0
D26	MF55D26L	60	550	257	172	200	220	0	A	B0
D26	MF55D26R	60	550	257	172	200	220	0	A	B0
D26	MF55D26R	70	600	257	172	200	220	0	A	B0
D26	MF80D26L	70	600	257	172	200	220	0	A	B0
D31	MF75D31L	75	660	302	172	200	220	0	A	B0
D31	MF95D31L	80	670	302	172	200	220	0	A	B0
D31	MF95D31R	80	670	302	172	200	220	1	A	B0
D31	MF105D31R	90	750	302	172	200	220	0	A	B0
L1	MF54459	44	390	208	174	190	190	0	A	B13
L2	MF55559	55	480	242	174	190	190	0	A	B13
L3	MF56638	66	540	277	174	190	190	0	A	B13
L3	MF57412	74	680	277	174	190	190	0	A	B13
L4	MF58043	80	640	315	174	190	190	0	A	B13
L5	MF58827	88	680	354	174	190	190	0	A	B13

How to Handle Battery

PRECAUTION

If treated with care and taking the proper precautions, lead acid batteries can be handled safely with minimum risk. However, lead acid batteries contain sulfuric acid which is both poisonous and corrosive. This makes them potentially hazardous and it can cause serious injury when standard handling procedures and safety measures are not followed.

Safety

- Always wear acid resistant clothing, protective goggles, PVC gloves and rubber boots.
- Avoid smoking, sparks and flames near operating or charging lead acid batteries.
- Keep metal objects away from terminals.
- Batteries are heavy. Lift carefully and do not place on unstable surfaces.
- Keep away from children.

Emergency Action

- Splashes in eyes : Wash out eyes with plenty of water for at least 15 minutes.
- Splashes on skin : Remove contaminated clothing carefully and wash the affected skin areas with plenty of water.
- Swallowed : Drink copious amounts of milk of magnesia, water or milk. Do not induce vomiting.

Storage

- Keep batteries upright.
- Batteries should not be directly exposed to the sun.
- Keep batteries clean and always store in a cool, dry place.
- Never stack over 4 layers.
- Never drop, never overthrow.
- In all cases, (First In, First Out) storage procedure should be applied.

Installation

- Check the vehicle's engine is turned off.
- Remove the negative terminal connection of the old battery.
- Remove the positive terminal connection, and then remove the hold-down bracket or clamp.
- Replace the old battery with the new battery and fix the new one in the tray.
- Prior to replacing the new one, inspect the tray for corrosion. Clean battery holder and battery terminals using a wire brush, if necessary.
- Connect the positive terminal first.
- Connect the negative terminal. The negative terminal should always be replaced last.

Disposal

- Batteries must NEVER be disposed of in household waste.
- Batteries are recyclable material.
- Do not throw away.





The plant was established in 1995 and started to operate in 1996 with 100% Thai ownership. The company located in Bangpoo Industrial estate, Samutprakarn province, Thailand. The beginning capacity was 20,000 batteries monthly with about 80 employees. Major initial investment was from US machinery.

The booming of export market in 1998 led to the first expansion to reach capacity of 30,000 batteries a month. Our "NC" batteries were known and seen in Middle East countries and Africa.

"NC" batteries had entering to South Asia and ASEAN countries in 2000.

The company was certified for the quality management system ISO 9001:2000 and NAC (National Accreditation of Thailand) from Global Certification Co., Ltd. in 2004.

In 2005, new product "Deep Cycle" batteries EB, PV and EV Series were launched to meet the increasing demand of renewable energy. Plant expansion for the second phase in 2008 boosted to maximum output capacity of 50,000 batteries a month with 100 staff and 20 technicians employed.



MAXXEN

AUTOMOTIVE BATTERIES / DEEP CYCLE BATTERIES



ISO 9001 Certified

PPC Asia
COMPARE US

MAXEN

For passenger cars and light trucks.
Long lasting with low maintenance required.



JIS Series

Group	Model	New JIS Model	Ah/20HR	Overall Dimension (mm)				Dry N.W. (kg)	Acid Vol. (L)	Cell Layout	Pole Type	Handle Type
				L	W	H	TH					
A19	12N24-3	26A19L	24	185	125	160	174	5.6	1.8	2	C	-
	12N24-4	26A19R	24	185	125	160	174	5.6	1.8	1	C	-
B20	NS40	32B20R	32	195	127	200	225	6.8	2.8	1	B	F
	NS40L	32B20L	32	195	127	200	225	6.8	2.8	2	B	F
	NS40Z	36B20R	35	195	127	200	225	8.0	2.5	1	B	F
	NS40ZL	36B20L	35	195	127	200	225	8.0	2.5	2	B	F
B24	N40	38B24R	40	236	127	200	225	9.0	3.3	1	A	F
	N40L	38B24L	40	236	127	200	225	9.0	3.3	2	A	F
	NS60	46B24R	45	236	127	200	225	9.4	3.0	1	B	F
	NS60L	46B24L	45	236	127	200	225	9.4	3.0	2	B	F
D23	55D23R	55D23R	55	230	170	200	225	11.2	3.7	1	A	B
	55D23L	55D23L	55	230	170	200	225	11.2	3.7	2	A	B
	65D23R	65D23R	65	230	170	200	225	12.6	3.5	1	A	B
	65D23L	65D23L	65	230	170	200	225	12.6	3.5	2	A	B
D26	N50	48D26R	50	256	170	200	225	9.8	5.4	1	A	B
	N50L	48D26L	50	256	170	200	225	9.8	5.4	2	A	B
	N50Z	55D26R	60	256	170	200	225	11.4	5.2	1	A	B
	N50ZL	55D26L	60	256	170	200	225	11.4	5.2	2	A	B
	NS70	65D26R	65	256	170	200	225	12.8	5.0	1	A	B
	NS70L	65D26L	65	256	170	200	225	12.8	5.0	2	A	B
D31	N70	65D31R	70	303	170	200	225	13.0	5.4	1	A	B
	N70L	65D31L	70	303	170	200	225	13.0	5.4	2	A	B
	N70Z	75D31R	80	303	170	200	225	14.8	5.2	1	A	B
	N70ZL	75D31L	80	303	170	200	225	14.8	5.2	2	A	B
	NX120-7	95D31R	85	303	170	200	225	15.8	5.0	1	A	B
	NX120-7L	95D31L	85	303	170	200	225	15.8	5.0	2	A	B

DIN Series

Group	Model	DIN Ref. Model	Ah/20HR	Overall Dimension (mm)				Dry N.W. (kg)	Acid Vol. (L)	Cell Layout	Pole Type	Hold Down
				L	W	H	TH					
LBN1	DIN36	53624	36	210	175	175	175	8.2	2.6	2	A	B1
LN1	DIN44	54434	44	210	175	190	190	9.5	3.0	2	A	B3
LBN2	DIN45	54533	45	240	175	175	175	8.8	3.3	2	A	B4
	DIN54	55460	54	240	175	175	175	11.0	2.9	2	A	B4
LN2	DIN55	55559	55	240	175	190	190	9.9	3.5	2	A	B3
	DIN55R	55548	55	240	175	190	190	9.9	3.5	1	A	B3
	DIN60	56030	60	240	175	190	190	11.2	3.3	2	A	B3
LBN3	DIN63	56318	63	276	175	175	175	12.9	4.5	2	A	B4
LN3	DIN66	56638	66	276	175	190	190	12.0	4.8	2	A	B3
	DIN75	57540	75	276	175	190	190	13.2	4.6	2	A	B3
LN5	DIN88	58827	88	350	175	190	190	14.3	5.6	2	A	B3
	DIN100	60038	100	350	175	190	190	15.5	5.2	2	A	B3

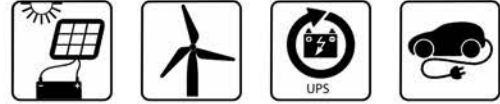
For heavy duty trucks and buses, low maintenance.



Group	Model	New JIS Model	Ah/20HR	Overall Dimension (mm)				Dry N.W. (kg)	Acid Vol. (L)	Cell Layout	Pole Type	Handle Type
				L	W	H	TH					
E41	N100A		90	406	173	209	232	15.9	7.8	1	A	D
	N100	95E41R	100	406	173	209	232	17.0	7.5	1	A	D
F51	N120A		110	502	180	210	255 / 235	19.4	9.8	3	A	X / R
	N120	115F51	120	502	180	210	255 / 235	21.8	9.5	3	A	X / R
G51	N150A		140	505	220	210	255 / 235	23.4	12.0	3	A	X / R
	N150	145G51	150	505	220	210	255 / 235	25.4	11.5	3	A	X / R
H52	N200A		190	517	275	216	268 / 240	31.8	15.5	3	A	X / R
	N200	190H52	200	517	275	216	268 / 240	33.2	15.0	3	A	X / R
4DLT	6BF25		135	510	210	195	215	23.0	11.2	4	A	R
6TN	6TN		100	280	266	208	230	19.0	8.0	5	A	R

MAXEN

Genuine deep cycle batteries for renewable energy system, solar system, and electric car.

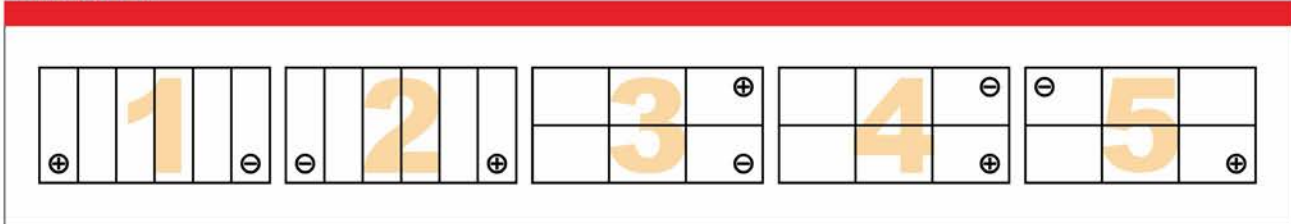


EB Series

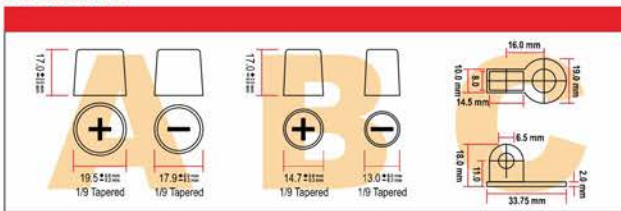
Model	V	Capacity		Max Charging Current (A)	Overall Dimension (mm)				Weight (kg)		Acid Vol. (L)	Terminal Layout	Terminal Type	Handle Type
		Ah/C5	Ah/C20		L	W	H	TH	Dry	Filled				
EB80	12	65	80	13.5	303	170	200	235	17.4	23.5	4.8	I-LE	L	F
EB130	12	100	130	22.0	409	173	212	244	24.3	33.5	7.2	I-LL	L	X
EB160	12	130	160	27.5	502	180	210	248	31.0	42.5	9.0	U-LL	L	R
EB200	12	160	200	33.5	505	220	210	248	36.7	51.0	11.2	U-LL	L	R

EB Series is genuine deep cycle battery with thicker plates and strong separators provide more stable supply of energy and better storage capacity. Best suited for solar cell system, UPS and power supply, electric vehicles, floor scrubber and material handling equipments.

CELL LAYOUT



POLE TYPE



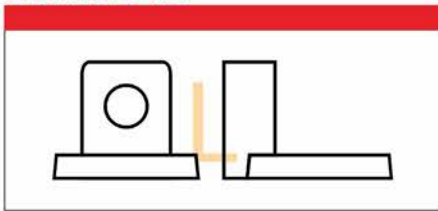
BASE HOLD DOWN



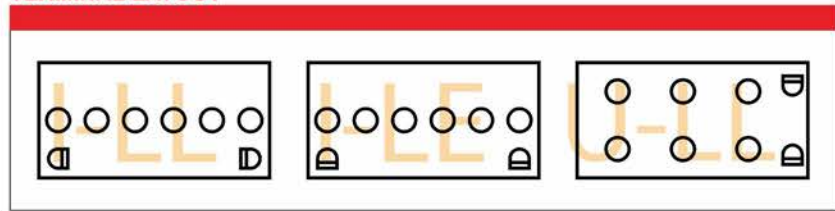
HANDLE TYPE

B = BUTTERFLY TYPE / F = FLIP HANDLE / D = DROP HANDLE / R = ROPE HANDLE / X = FIXED HANDLE

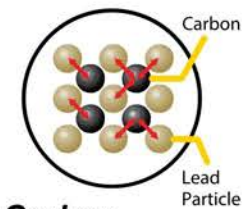
TERMINAL TYPE



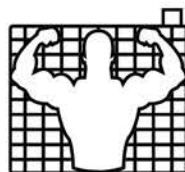
TERMINAL LAYOUT



Special features:



Carbon Technology



Strong Grids



Thicker Plates*

*compare to expanded and punched grids



Lead Alloy Casting

With supreme combination of carbon technology and specialized additive plus stronger grids and thick plates lead alloy casting, MAXEN bring you the long lasting and low maintenance for heavy duty applications.



Zhangzhou Huawei Power Source Science & Technology Co., Ltd. Established for investors is a joint stock enterprise, which possesses three wholly-owned subsidiaries: Huawei Power Source (Hongkong) Co., Ltd., Huawei Power Source (Thailand) Co., Ltd., Huawei Power Source (Indonesia) Co., Ltd...Zhangzhou Huawei concentrates on the R&D, manufacturing and selling of backup batteries, starter batteries, power batteries series, especially has rich and practical experience and outstanding advantages in motorcycle batteries field. The company possesses indigenously-developed patented designs, advanced lead plate production process, automatic assembly line, cutting-edge charging, inspection and testing equipment, and successfully applies the electronic technology in the lead acid batteries which brings a storm of technology reformation to the worldwide lead acid battery development; The company has gained the ISO9001, ISO14001, OHSAS180001 certificates and approved as National High-tech Enterprises and Fujian Famous Export Brand for Priority Cultivation and Development, and boosted the lean manufacturing management in every factories in order to promote the product international competitiveness. The company has taken the lead in acquiring the certificates of UL, CE, TLC, INMETRO, Adopting International Standard Product Marking Certificate, Golden Sun, GMC, Certificate of Quality License for Export Products and other inspection & quarantine reports.





MAINTERNANCE FREE (MF)

- High performance maintenance free design
- High capacity for good cranking performance and long service life
- Drycharged “On demand activation” design allows shelf life

AVAILABLE SIZES			
YTX3L-BS	YTX7A-BS	YTX3L-BS (SS)	YTX5L-BS (SS)
YTX4L-BS	12N5L-BS	YTX4L-BS (SS)	YTX6.5L-BS (SS)
YTX5LBS	YTX2.5L-BS (SS)	YT5AL-BS (SS)	YTX7A-BS (SS)



LOW MAINTENANCE (LM)

- High capacity for good performance and long service life
- Dry charged “On demand activation” design allows shelf life

AVAILABLE SIZES
12N7-3B
12N9-4B-1
12N12-3B