



# STARTER BATTERIES

## HANKOOK BATTERIES



- No. 1 manufacturer starting batteries in Korea!
- Best price/quality !
- 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.



### DELIVERING OUTSTANDING PRODUCT QUALITY THROUGH INNOVATIVE TECHNOLOGY:

- Long Life
- Enhanced Power
- Reliable Performance
- Improved Safety and Usability

### BATTERY STRUCTURE

1. X-Frame Grid Technology and Grid Protection Technology
2. Enveloped separator for low electric resistance
3. Advanced center lug technology and cast on strap
4. Sealed double lid with frame arrestor
5. Integrated computer design and reinforced container
6. Magic eye indicator

### MAIN FEATURES

- Completely maintenance free: Calcium maintenance free
- Fully closed lid: no leakage and minimal gassing
- Magic eye for easy indication of the state of the battery
- High cold cranking amps
- Proven reliability
- Handles to make moving easier

### TECHNICAL INFORMATION

For more details about fixations, layouts & terminals, flip to pages 98 & 99 for more information.



**START STOP PLUS**  
with AGM Tech.



**START STOP**  
with EFB Tech.



**SEALED MF**  
with Ca/Ca Tech.

**SMF**  
Maintenance Free



**HANKOOK®**  
STARTER BATTERIES

Ref.	Group N°	Voltage (V)	Capacity (Ah)	CCA (EN) (A)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Layout	Fixation	Terminals	Magic eye
MF53504	B19	12	35	330	187	127	220	9,1	0	B01	3	yes
MF54026	B19	12	40	360	187	127	220	9,5	0	B00	3	yes
MF54027	B19	12	40	360	187	127	220	9,5	1	B00	3	yes
MF54080	L0	12	40	340	174	174	190	10,3	0	B13	1	yes
MF54321	LB1	12	45	450	208	174	175	11,7	0	B13	1	yes
MF54459	L1	12	44	390	208	174	190	11,4	0	B13	1	yes
MF54464	L1	12	44	390	208	174	190	11,4	1	B13	1	yes
MF54523	B24	12	45	360	234	127	220	11,9	0	B00	1	yes
MF54524	B24	12	45	360	234	127	220	11,9	1	B00	1	yes
MF54519	LB2	12	45	390	242	174	175	12,2	0	B13	1	yes
MF54551	B24	12	45	360	234	127	220	11,1	1	B00	3	yes
MF54584	B24	12	45	360	234	127	220	11,1	0	B00	3	yes
MF55041	D20	12	50	390	200	172	220	12,9	0	B01	1	yes
MF55042	D20	12	50	390	200	172	220	12,9	1	B01	1	yes
MF55457	LB2	12	54	480	242	174	175	13,1	0	B13	1	yes
MF55459	LB2	12	54	480	242	174	175	13,1	1	B13	1	yes
MF56068	D23	12	60	480	230	172	220	15,3	0	B00	1	yes
MF56069	D23	12	60	480	230	172	220	15,3	1	B00	1	yes
MF56048	D26	12	60	480	266	172	220	16,4	0	B01	1	yes
MF56049	D26	12	60	480	266	172	220	16,4	1	B01	1	yes
MF56077	LB2	12	60	510	242	174	175	14,1	0	B13	1	yes
MF56219	L2	12	62	540	242	174	190	14,7	0	B13	1	yes
MF56220	L2	12	62	540	242	174	190	14,1	1	B13	1	yes
MF57024	D26	12	70	540	266	172	220	17,1	1	B01	1	yes
MF57029	D26	12	70	540	266	172	220	17,1	0	B01	1	yes
MF56821	LB3	12	68	570	277	174	175	15,3	1	B13	1	yes
MF56828	LB3	12	68	570	277	174	175	15,9	0	B13	1	yes
MF57113	LB3	12	72	640	277	174	175	16,7	0	B13	1	yes
MF57412	L3	12	74	680	277	174	190	17,7	0	B13	1	yes
MF57413	L3	12	74	680	277	174	190	17,6	1	B13	1	yes
MF57539	LB4	12	75	640	315	174	175	18,2	0	B13	1	yes
MF58043	L4	12	80	640	315	174	190	19,2	0	B13	1	yes
MF58515	LB5	12	85	720	354	174	175	20,2	0	B13	1	yes
MF58827	L5	12	88	680	354	174	190	21,7	0	B13	1	yes
MF58821	L5	12	88	680	354	174	190	21,7	1	B13	1	yes
MF60038	L5	12	100	850	354	174	190	22,9	0	B13	1	yes
MF60045	D31	12	100	760	302	172	220	22,1	0	B01	1	yes
MF60046	D31	12	100	760	302	172	220	22,1	1	B01	1	yes
START27MF	M27	12	80	720	302	172	220	20,2	1	B01	DT 1 + 8	no
START31MF	C31	12	100	800	330	172	242	23,0	1	B00	DT 1 + 8	no
60528	COM100	12	105	680	342	172	236	26,3	0	B00	1	no
60527	COM100	12	105	680	342	172	236	26,3	1	B00	1	no
MF115E41L	E41	12	110	900	402	171	226	26,0	0	B00	1	yes
62512	COM125	12	125	720	342	172	286	30,7	0	B00	1	no
MF64589	A	12	145	800	511	188	217	35,9	3	B00	1	yes
MF68032	B	12	180	1000	511	222	217	44,7	3	B00	1	yes
MF72512	C	12	225	1150	516	274	238	58,2	3	B00	1	yes



# STARTER BATTERIES

## HANKOOK BATTERIES

### HANKOOK START STOP BATTERY

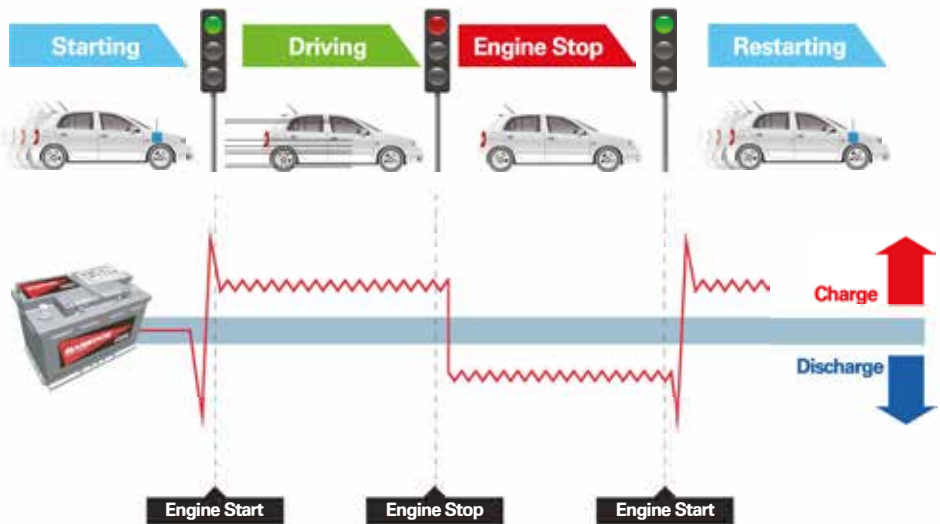
Start Stop vehicles require enhanced batteries due to the frequent start and stop events at traffic lights. Therefore, battery with enhanced durability and charge acceptance is required to withstand the severe driving environments for the Start Stop vehicles.

Hankook Start Stop series have enhanced the durability and battery life to perfectly optimize for the Start Stop vehicles.

Always replace your battery with a new battery with the same technology!  
Cars with a start-stop system have very different demands of the battery than a traditional car.

- Replace AGM -> AGM
- Replace EFB -> EFB

### Start Stop System



### HANKOOK START STOP AGM TECHNOLOGY

For advanced Start Stop vehicles, powerful trucks, SUVs, vans with many power consumers:

- Absorbent Glass Mat separator
- VRLA sealed construction
- X-Frame Technology
- 4x time longer idling stop life cycle
- Charge acceptance 150% up
- Starting power 130% up
- Optimal safety for passenger compartment installation



Ref.	Group N°	Voltage (V)	Capacity (Ah)	CCA (EN) (A)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Layout	Fixation	Terminals	Magic eye
SA55020	L1	12	50	540	208	174	190	15,2	0	B13	1	no
SA56020	L2	12	60	680	242	174	190	16,9	0	B13	1	no
SA57020	L3	12	70	760	275	174	190	19,6	0	B13	1	no
SA58020	L4	12	80	800	315	174	190	22,0	0	B13	1	no
SA59520	L5	12	95	850	352	174	190	24,9	0	B13	1	no
SA60520	L6	12	105	950	393	174	190	29,2	0	B13	1	no



## Performance Rating Comparison

	SMF	Start Stop (EFB)	Start Stop+ (AGM)
Starting Power	★	★★	★★★
Charge Acceptance	★	★★	★★★
Vibration Resistance	★	★	★★★
ISS Life Cycle	—	★★	★★★
Safety	★	★★	★★★
Application	Standard diesel & petrol engine	Start Stop System	Advanced Start Stop System

★ Good    ★★ Very Good    ★★★ Excellent

# HANKOOK®



## HANKOOK START STOP WITH EFB TECHNOLOGY

Start Stop for vehicles with many power consumers

- Sealed Maintenance Free with double lid
- X-frame Technology
- Carbon additives
- 3x time longer idling stop life cycle
- Charge acceptance +130% up
- Starting power 115% up



Ref.	Group N°	Voltage (V)	Capacity (Ah)	CCA (EN) (A)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Layout	Fixation	Terminals	Magic eye
SE56010	L2	12	60	560	242	174	190	15,6	0	B13	1	yes
SE56510	LB3	12	65	650	277	174	175	16,7	0	B13	1	yes
SEQ85L	D23	12	65	670	230	172	220	17,2	0	B00	1	yes
SES95L	D26	12	68	730	257	172	220	19,2	0	B01	1	yes
SE57010	L3	12	70	650	277	174	190	18,7	0	B13	1	yes
SE57510	LB4	12	75	730	315	174	175	19,5	0	B13	1	yes
SE58010	L4	12	80	730	315	174	190	21,7	0	B13	1	yes
SE59510	L5	12	95	900	352	174	190	23,3	0	B13	1	yes
SE61010	L6	12	110	950	398	174	190	28,3	0	B13	1	yes



## AUXILIARY BATTERY WITH AGM TECHNOLOGY

Hybrid cars are equipped with high voltage main battery (Ni-MH, Li-Ion) and Auxiliary Battery for electronic devices as well as cranking internal combustion engine.

The Hankook HEV is designed with accumulated AGM technology for the perfect requirement and performance to provide stable power for Hybrid Electric Vehicles (such as Toyota Prius, ...) or cars in the premium segment with a 2nd auxiliary battery (BMW, Mercedes, ...)

- Absorbent Glass Mat separator
- VRLA sealed construction
- X-Frame Technology
- High reliability
- Charge acceptance 150% up
- Starting power 130% up
- Optimal safety for passenger compartment installation

Ref.	Voltage (V)	Capacity (Ah)	CCA (EN) (A)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Layout	Fixation	Terminals	Magic eye
AXS46B24R	12	45	370	236	125	220	12,99	1	B00	3	no
AXS46B24L	12	45	370	236	125	220	12,99	0	B00	3	no
AXS55D23R	12	50	550	220	170	220	15,06	1	B00	1	no
AXS55D23L	12	50	550	220	170	220	15,06	0	B00	1	no
AXS65D26R	12	75	750	260	172	220	19,67	1	B01	1	no
AXS65D26L	12	75	750	260	172	220	19,67	0	B01	1	no