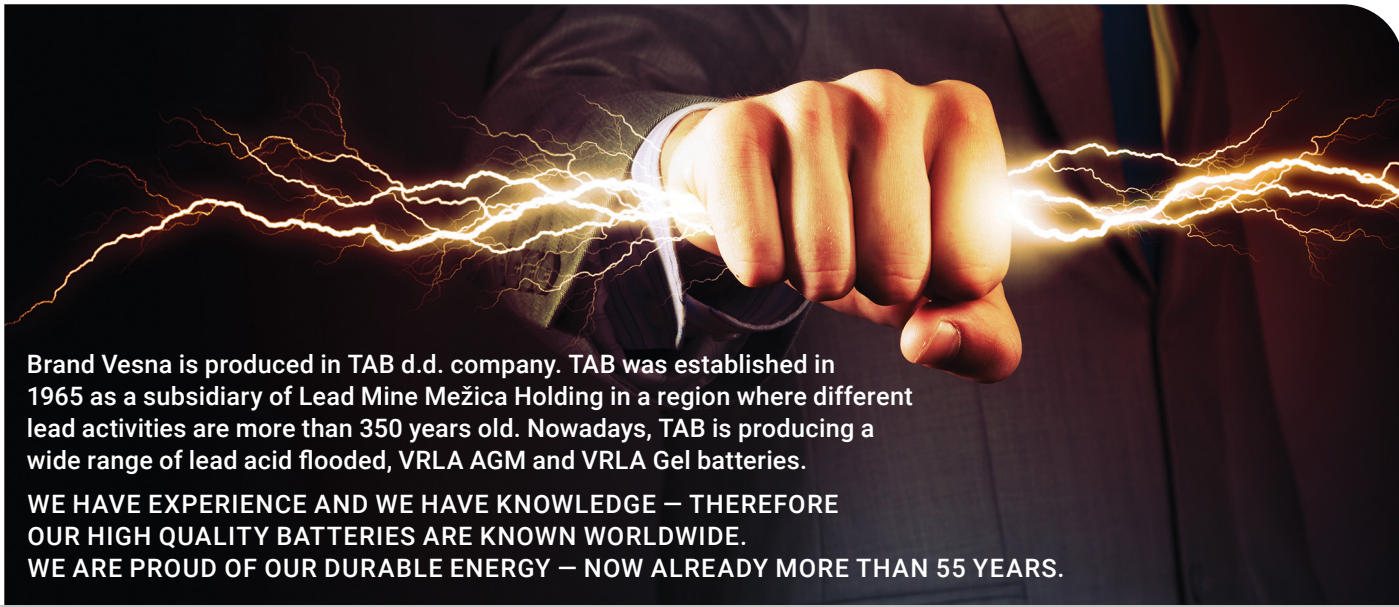


ENGLISH

VESNA STARTER BATTERIES



VESNA POWER
VESNA POWER TRUCK
VESNA PREMIUM TRUCK
VESNA PREMIUM
VESNA EFB Stop & Go
VESNA AGM Stop & Go



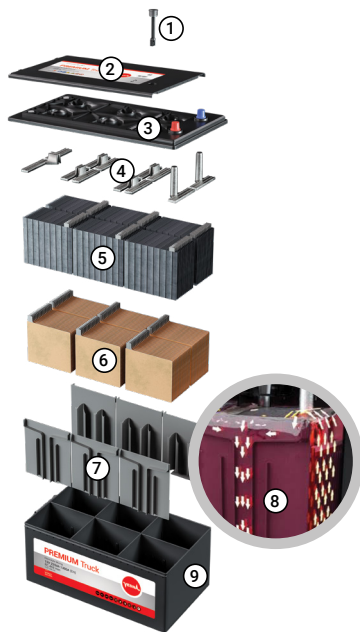
Brand Vesna is produced in TAB d.d. company. TAB was established in 1965 as a subsidiary of Lead Mine Mežica Holding in a region where different lead activities are more than 350 years old. Nowadays, TAB is producing a wide range of lead acid flooded, VRLA AGM and VRLA Gel batteries.

WE HAVE EXPERIENCE AND WE HAVE KNOWLEDGE – THEREFORE OUR HIGH QUALITY BATTERIES ARE KNOWN WORLDWIDE. WE ARE PROUD OF OUR DURABLE ENERGY – NOW ALREADY MORE THAN 55 YEARS.

TAB tovarna akumulatorskih baterij d.d., Polena 6, SI-2392 Mežica, Slovenia | info@tab.si | +386 (0)2 8702 300 | www.tab.si

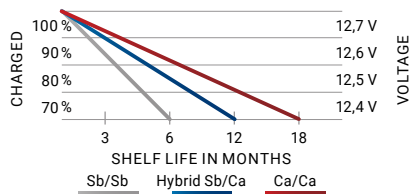
ENERGY IN MOTION

EMS TRUCK BATTERIES

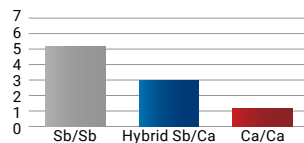


- 1 Electrolyte level indicator – Magic Eye
- 2 Top SMF lid with central degassing and flame arrestors (Battery manufactured by using Sb/Ca technology is fitted with a Flat lid with M27 plugs, for easy access)
- 3 Main SMF lid with labyrinth for additional safety and very low water loss
- 4 Robust plate connectors with large surface inter cell welds, increasing cranking power
- 5 Negative plate with additives for increased charging abilities. Permanent sulfation is severely restricted
- 6 Positive plates with thick casted grids. High-density active mass increases cycle life plus enhanced resistance to deep discharge
- 7 Integrated flexible ribs which generate adequate pressure to the plate stack in all states of charge
- 8 New cell design promotes acid motion in vertical direction, eliminating stratification
- 9 Impact resistant polypropylene container

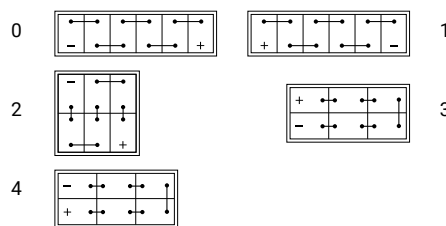
Allowable shelf life (SELFDISCHARGE)



Water consumption (g/Ah)



Layout

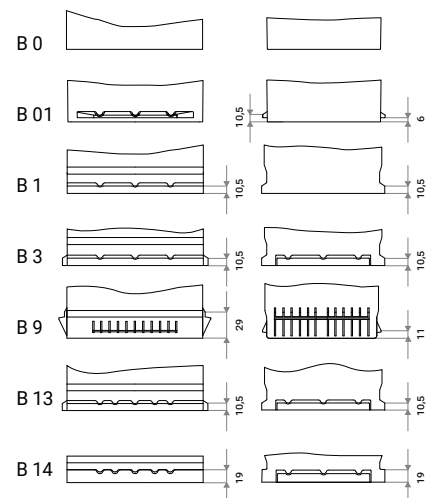


Glossary of remarks

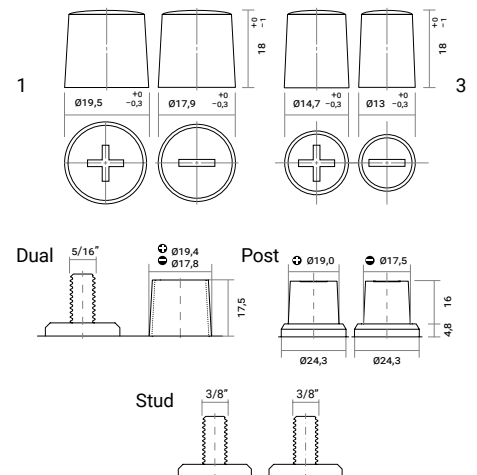
- K** Kamina
- H** Handle
- KH** Kamina Handle
- ME** Magic Eye
- HD** Heavy Duty
- JIS** Japanese Poles
- P** Post Poles
- SMF** Maintenance Free = Sealed
- DP** Dual Poles
- A** Pole Adapter
- AGM** Absorbed Glass Mat
- EMS** Electrolyte Mixing System
- S** Stud Poles

All measures and weights are within standard production tolerances. Technical modifications are reserved without prior notice. Weight tolerance is ± 5 %.

Base hold down



Terminals



VESNA POWER is battery produced using Ca/Ca expanded metal technology designed for vehicles with entry level of electric equipment with demand of superior starting, performance and reliability. Vesna Power is real all rounder offering excellent power, capacity, cold start performance and reliability. SMF lid/cover provides complete roll over spill protection and is entirely maintenance free throughout the batteries life. This is high quality product for vehicles of every class.

- + High starting capabilities
- + Sealed cover construction
- + Explosion protection prevents flame break-in into the battery
- + Reliable starting at extreme climatic conditions



VESNA POWER

Flooded starter batteries, Ca/Ca technology | CAR batteries

ID	DIN marking	Short code	C20 (Ah)	RC (min)	Box type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
1000859	54506	B45	45	71	L0	400	175×175×190	B13	0	10,5	72/120	K
1001573	54002 SMF	P040	40	62	L1B	360	207×175×175	B13	0	10,7	72/120	SMF, H
1001588	54003 SMF	P040X	40	62	L1B	360	207×175×175	B13	1	10,7	72/120	SMF, H
1001555	54502 SMF	P045	45	71	L1B	420	207×175×175	B13	0	11,2	72/120	SMF, H
1001596	54559 SMF	B45H	45	71	L1	400	207×175×190	B13	0	11,7	72/100	SMF, H
1001575	55010 SMF	P050H	50	81	L1	450	207×175×190	B13	0	12,2	72/100	SMF, H
1001574	55001 SMF	B54	54	88	L2B	450	242×175×175	B13	0	12,7	63/108	SMF, H
1001577	55509 SMF	P055	55	90	L2B	500	242×175×175	B13	0	13,3	63/108	SMF, H
1001604	55559 SMF	B55H	55	90	L2	500	242×175×190	B13	0	13,9	63/90	SMF, H
1001579	56008 SMF	P060H	60	100	L2	600	242×175×190	B13	0	14,4	63/90	SMF, H
1001571	56013 SMF	P060HX	60	100	L2	600	242×175×190	B13	1	14,4	63/90	SMF, H
1001580	56309 SMF	B68	68	116	L3B	600	278×175×175	B13	0	15,5	51/80	SMF, H, HD
1001560	57309 SMF	P073	73	126	L3B	630	278×175×175	B13	0	15,9	51/80	SMF, H, HD
1001583	56638 SMF	B73H	73	126	L3	600	278×175×190	B13	0	16,1	51/80	SMF, H, HD
1001561	57412 SMF	P074H	74	128	L3	680	278×175×190	B13	0	17,2	51/80	SMF, H, HD
1001593	57413 SMF	P074HX	74	128	L3	680	278×175×190	B13	1	17,2	51/80	SMF, H, HD
1001585	59249 SMF	B92H	92	165	L4	800	315×175×190	B13	0	20,0	42/60	SMF, H, HD
1001565	59220 SMF	P092	92	165	L5B	800	353×175×175	B13	0	20,5	36/72	SMF, H, HD
1001564	58827 SMF	B88H	88	156	L5	720	353×175×190	B13	0	21,0	36/60	SMF, H, HD
1001551	60038 SMF	P010H	100	182	L5	850	353×175×190	B13	0	22,4	36/60	SMF, H, HD, ME
1001553	53520 SMF	P035J	35	53	B19	270	196×128×202/223	B0	0	9,4	96/128	SMF, H, JIS
1001568	53522 SMF	P035JX	35	53	B19	270	196×128×202/223	B0	1	9,4	96/128	SMF, H, JIS
1001572	53521 SMF	P035JP	35	53	B19	270	196×134×202/223	B01	0	9,4	96/128	SMF, H, JIS
1001554	54520 SMF	P045J	45	71	B19	360	196×134×202/223	B01	0	10,6	96/128	SMF, H, JIS, A
1001569	54522 SMF	P045JX	45	71	B19	360	196×134×202/223	B01	1	10,6	96/128	SMF, H, JIS, A
1001603	54523/84 SMF	P045JA	45	71	B24	360	236×128×202/223	B0	0	11,9	72/96	SMF, H, JIS, A
1001606	54524/51 SMF	P045JAX	45	71	B24	360	236×128×202/223	B0	1	11,9	72/96	SMF, H, JIS, A
1001611	55523/84 SMF	P055JA	55	90	B24	490	236×128×202/223	B0	0	13,5	72/96	SMF, H, JIS, A
1001607	55524/51 SMF	P055JAX	55	90	B24	490	236×128×202/223	B0	1	13,5	72/96	SMF, H, JIS, A
1001557	56068 SMF	P060J	60	100	D23	600	230×173×200/220	B01	0	14,9	60/90	SMF, ME, H
1001570	56069 SMF	P060JX	60	100	D23	600	230×173×200/220	B01	1	14,9	60/90	SMF, ME, H
1001613	56568 SMF	P065J	65	110	D23	650	230×173×200/220	B01	0	15,5	60/90	SMF, ME, H
1001615	56569 SMF	P065JX	65	110	D23	650	230×173×200/220	B01	1	15,5	60/90	SMF, ME, H
1001582	57029 SMF	P070J	70	120	D26	700	259×175×200/221	B1	0	17,3	48/80	SMF, ME, H
1001592	57024 SMF	P070JX	70	120	D26	700	259×175×200/221	B1	1	17,3	48/80	SMF, ME, H
1001614	57529 SMF	P075J	75	130	D26	740	259×175×200/221	B1	0	17,8	48/80	SMF, ME, H
1001608	57524 SMF	P075JX	75	130	D26	740	259×175×200/221	B1	1	17,8	48/80	SMF, ME, H
1001586	59518 SMF	P095J	95	171	D31	850	306×173×200/221	B01	0	20,9	42/70	SMF, ME, H
1001594	59519 SMF	P095JX	95	171	D31	850	306×173×200/221	B01	1	20,9	42/70	SMF, ME, H
1001605	BCI 31P SMF	V90BCIP	90	161	BCI 31	800	330×173×218/239	B1	0	23,4	42/60	SMF, ME, H, HD, P
1001609	BCI 31S SMF	V100BCIS	100	182	BCI 31	900	330×173×218/239	B1	0	24,3	42/60	SMF, ME, H, HD, S
1001601	BCI 31S SMF-D	P110BCID	110	203	BCI 31	1000	330×173×218/237	B1	0	26,2	42/60	SMF, ME, H, HD, DP

VESNA POWER TRUCK

Flooded starter batteries, Sb/Ca technology | TRUCK batteries | Flat lid with M27 plugs

ID	DIN marking	Short code	C20 (Ah)	RC (min)	Box type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
1000856	61028	VT11	110	203	60528	800	345×172×218/238	B0	0	26,5	36/48	H
1000854	61028	VT11P	110	203	60528	800	345×175×218/238	B1	0	26,5	36/48	H
1002641	61044	VT11M	110	203	MAC110	720	509×175×182/208	B3	3	31,1	24/40	H, HD
1000857	62512	VT12H	125	235	62512	800	345×172×269/289	B0	0	33,0	24/36	H
1003047	63530	VT13A	135	258	A	850	513×189×194/220	B0	3	35,6	24/35	H, HD
1002395	63544	VT13M	135	258	MAC110	850	509×175×182/208	B3	3	33,3	24/40	H, HD
1003048	63545	VT13MR	135	258	MAC110	850	509×175×182/208	B3	4	33,3	24/40	H, HD
1002530	65048	VT15M	150	292	MAC110	1000	509×175×182/208	B3	3	36,9	21/35	H, HD
1000516	67018	VT17	170	338	B	1050	512×222×194/221	B0	3	42,7	21/28	H, HD, EMS
1000517	67019	VT17R	170	338	B	1050	512×222×194/221	B3	4	42,7	21/28	H, HD, EMS
1000566	68032	VT18	180	361	B	1100	512×222×194/221	B0	3	43,3	21/28	H, HD, EMS
1000568	69032	VT19	190	385	B	1200	512×222×194/221	B0	3	43,3	21/28	H, HD, EMS
1003049	70027	VT20C	200	409	C	1200	518×273×214/241	B0	3	52,7	18/24	H, HD, EMS
1003050	72527	VT22	225	469	C	1300	518×273×214/241	B0	3	56,1	18/24	H, HD, EMS
1002282	6TN	VT11D7	110	203	D7	740	282×269×208/230	B0	2	30,8	24/36	H, HD



VESNA TRUCK

VESNA PREMIUM TRUCK

Flooded starter batteries, Ca/Ca technology | TRUCK batteries

ID	DIN marking	Short code	C20 (Ah)	RC (min)	Box type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
1000691	63544 SMF	VTP13M	135	258	MAC110	850	509×175×196/218	B3	3	33,3	24/40	SMF, ME, H, HD
1000850	64030 SMF	VTP14	140	269	A	850	507×188×200/222	B0	3	35,6	24/35	SMF, ME, H, HD
1000702	65048 SMF	VTP15M	150	292	MAC110	1000	509×175×196/218	B3	3	36,9	24/40	SMF, ME, H, HD
1001761	65018 SMF	VTP15	150	292	B	950	513×222×194/216	B0	3	39,6	21/35	SMF, ME, H, HD, EMS
1001762	68032 SMF	VTP18	180	361	B	1100	513×222×194/216	B0	3	43,1	21/28	SMF, ME, H, HD, EMS
1000705	70027 SMF	VTP20	200	409	C	1200	517×275×214/236	B0	3	52,7	18/24	SMF, ME, H, HD, EMS
1000707	72527 SMF	VTP22	225	469	C	1300	517×275×214/236	B0	3	56,1	18/24	SMF, ME, H, HD, EMS

VESNA PREMIUM utilises the latest innovations in Ca/Ca manufacturing technology, providing for the highest cold start performance and superior reliable power as demanded by the latest generation of cars with high energy drain. The SMF lid/cover provides complete roll over spill protection and is entirely maintenance free throughout the batteries life.

- + Sealed cover construction
- + Higher number of plates ensure 30% better starting capabilities
- + The expanded metal technology results in better corrosion resistance and providing a longer life time
- + The level indicator (magic eye) provides an instant status check
- + Explosion protection prevents flame brake-in into the battery
- + Ideal for cars with lots of electrical equipment
- + Battery of highest quality



VESNA PREMIUM

Flooded starter batteries, Ca/Ca technology | CAR batteries

ID	DIN marking	Short code	C20 (Ah)	RC (min)	Box type	EN (A)	LxWxH (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
1001576	55401 SMF	PR54	54	88	L1B	510	207x175x175	B13	0	12,3	72/120	SMF, ME, H
1001597	55510 SMF	PR55H	55	90	L1	560	207x175x190	B13	0	12,8	72/100	SMF, ME, H
1001556	56249 SMF	PR62	62	104	L2B	600	242x175x175	B13	0	13,9	63/108	SMF, ME, H
1001581	56649 SMF	PR66H	66	112	L2	640	242x175x190	B13	0	15,0	63/90	SMF, ME, H
1001562	57510 SMF	PR75	75	130	L3B	720	278x175x175	B13	0	16,5	51/80	SMF, ME, H, HD
1001584	57549 SMF	PR75H	78	135	L3	750	278x175x190	B13	0	17,5	51/80	SMF, ME, H, HD
1001563	58514 SMF	PR85	85	150	L4B	800	315x175x175	B13	0	18,9	42/72	SMF, ME, H, HD
1001567	60044 SMF	PR100H	100	182	L5	900	353x175x190	B13	0	22,5	36/60	SMF, ME, H, HD
1000852	61002 SMF	PR110H	110	203	L6	1000	394x175x190	B13	0	24,7	36/60	SMF, ME, H, HD

ENERGY IN MOTION



OUR CONTRIBUTION T



VESNA EFB Stop & Go batteries are so called Enhanced Flooded Batteries intended for use in vehicles with entry level Start-Stop function. EFB batteries utilize the latest innovations in Ca/Ca flooded battery manufacturing technology, providing for the superior reliable power as demanded by the latest generation of cars with entry level Start-Stop system.


- + MFW fleece on positive plates, preventing active material shedding boast twice as much cyclic capability as standard batteries and can be more discharged without any loss of functionality
- + Improved charge acceptance for recovering energy more quickly during driving phase using special expander with carbon
- + The expanded metal technology results in better corrosion resistance providing a longer life time
- + Sealed cover construction, roll over proof
- + Maintenance free
- + The level indicator (magic eye) provides an instant status check
- + Explosion protection with flame arrestor



VESNA EFB Stop & Go

EFB starter batteries, Ca/Ca technology | CAR and LKW batteries

ID	DIN marking	Short code	C20 (Ah)	RC (min)	Box type	EN (A)	LxWxH (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
1001377	56088 EFB	VSG60	60	100	L2	640	242x175x190	B13	0	16,6	63/90	SMF, ME, H
1001381	56588 EFB	VSG65	65	110	L3B	650	278x175x175	B13	0	16,7	51/80	SMF, ME, H, HD
1001382	57088 EFB	VSG70	70	120	L3	760	278x175x190	B13	0	19,2	51/80	SMF, ME, H, HD
1001383	58014 EFB	VSG75	75	130	L4B	730	315x175x175	B13	0	18,2	42/72	SMF, ME, H, HD
1001384	58088 EFB	VSG80	80	140	L4	800	315x175x190	B13	0	21,9	42/60	SMF, ME, H, HD
1001385	59088 EFB	VSG90	90	161	L5	850	353x175x190	B13	0	24,6	36/60	SMF, ME, H, HD
1001920	69032 EFB	VSG19	190	385	B	1100	513x222x194/216	B0	3	45,3	21/28	SMF, ME, H, HD, EMS
1001776	74027 EFB	VSG24	240	506	C	1250	517x275x214/236	B0	3	58,6	18/24	SMF, ME, H, HD, EMS
1001379	56568 EFB	VSG65J	65	110	D23	600	230x173x200/220	B01	0	17,1	60/90	SMF, ME, H
1001378	56569 EFB	VSG65JX	65	110	D23	600	230x173x200/220	B01	1	17,1	60/90	SMF, ME, H
1001388	57029 EFB	VSG70J	70	120	D26	680	259x175x200/221	B1	0	19,6	48/80	SMF, ME, H
1001389	57024 EFB	VSG70JX	70	120	D26	680	259x175x200/221	B1	1	19,6	48/80	SMF, ME, H
1001380	60518 EFB	VSG10J	105	192	D31	900	306x173x200/221	B01	0	23,3	42/70	SMF, ME, H
1001386	60519 EFB	VSG10JX	105	192	D31	900	306x173x200/221	B01	1	23,3	42/70	SMF, ME, H



0 LOW CO₂ EMISSIONS

VESNA AGM Stop & Go batteries are Valve Regulated Lead Acid batteries intended for use in vehicles with enhanced level Start-Stop function with break energy recuperation. VRLA AGM battery is improved lead acid battery to its maximum performance. The battery cells are closed by a pressure relief valve and electrolyte is immobilized in absorbed glass mat (AGM). Plate stacks are kept in the cells under pressure.

THE ADVANCED CONSTRUCTION OF BATTERY LEADS TO IMPROVED PERFORMANCE IN:

- + Very low water consumption due to internal oxygen recombination,
- + Preventing active material shedding boast more than three times as much cyclic capability as standard batteries and can be more discharged without any loss of functionality
- + Increased cranking power due to better utilization of cell volume by more than 30 %
- + High rate charge acceptance for recovering energy more quickly during driving phase
- + Both side pasting of plates provides better corrosion resistance providing a longer life time
- + No acid stratification like in flooded cells
- + Explosive safe - minimum explosive gasses are produced
- + Vibration resistance and no acid leakage in case of crash



VESNA AGM Stop & Go

AGM starter batteries, Ca/Ca technology | CAR batteries

ID	DIN marking	Short code	C20 (Ah)	RC (min)	Box type	EN (A)	LxWxH (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
1001390	L2 AGM	VAG60	60	109	L2	680	242x175x190	B13	0	17,9	63/90	AGM, H
1001391	L3 AGM	VAG70	70	130	L3	760	278x175x190	B13	0	20,5	51/80	AGM, H
1001392	L4 AGM	VAG80	80	151	L4	800	315x175x190	B13	0	23,2	42/60	AGM, H
1001393	L5 AGM	VAG95	95	184	L5	850	353x175x190	B13	0	26,0	36/60	AGM, H
1001394	L6 AGM	VAG105	105	206	L6	950	394x175x190	B13	0	29,2	36/60	AGM, H
1027582	57029 AGM	VAG75	75	140	D26	750	263x173x200/221	B1	0	20,4	48/80	AGM, H
1027583	57024 AGM	VAG75X	75	140	D26	750	263x173x200/221	B1	1	20,4	48/80	AGM, H

L0
175×175×190
B13



L1B SMF
207×175×175
B13



L1 SMF
207×175×190
B13



L2B SMF
242×175×175
B13



L2 SMF
242×175×190
B13



L3B SMF
278×175×175
B13



L3 SMF
278×175×190
B13



L4B SMF
315×175×175
B13



L4 SMF
315×175×190
B13



L5B SMF
353×175×175
B13



L5 SMF
353×175×190
B13



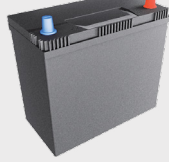
L6 SMF
394×175×190
B13



B19 SMF
196×134×202/223
B01



B24 SMF
236×128×202/223
B0



D23 SMF
230×173×200/220
B01



D26 SMF
259×175×200/221
B1



D31 SMF
306×173×200/221
B01



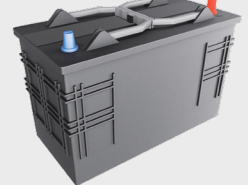
BCI 31 SMF
330×173×218/239
B1



BCI 31 DUAL SMF
330×173×218/237
B1



60528
345×172×218/238
B0



62512
345×172×269/289
B0



MAC110
509×175×182/208
B3



MAC110 SMF
509×175×196/218
B3



MAC143
509×216×184/210
B3



A
513×189×194/220
B0



A SMF
507×188×200/222
B0



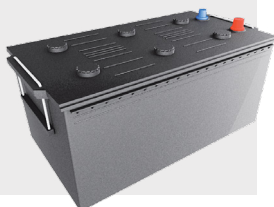
B
512×222×194/221
B0



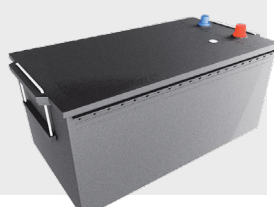
B SMF
513×222×194/216
B0



C
518×273×214/241
B0



C SMF
517×275×214/236
B0



D7
282×269×208/230
B0



Mower
196×127×159/185
B0

