

STARTER VESNA STARTER BATTERIES



- Starter Vesna Classic
- Starter Vesna Plus Truck
- Starter Vesna Plus
- Starter Vesna Ultra
- Starter Vesna Ultra Truck
- Starter Vesna Ultra EFB Stop & Go
- Starter Vesna Ultra AGM Stop & Go

Starter

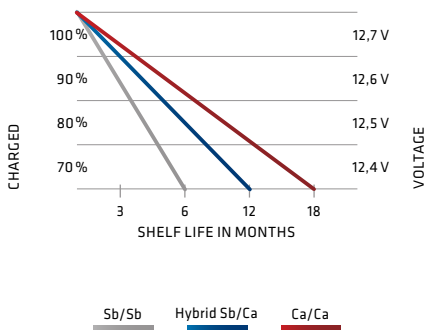
Brand **Starter Vesna** is produced in TAB d.d. company. **TAB was established in 1965** as a subsidiary of Lead Mine Mežica Holding in a region where different lead activities are more than 350 years old. Nowadays, TAB is producing a wide range of lead acid flooded, VRLA AGM and VRLA Gel batteries.

**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 50 YEARS.**

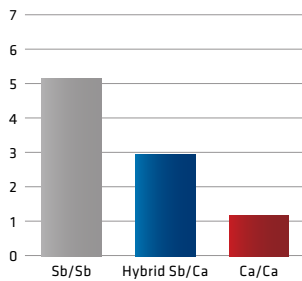
TAB Tovarna Akumulatorskih Baterij d. d., Polena 6, SI-2392 Mežica, Slovenia | info@tab.si | +386 (0)2 8702 300 | www.tab.si



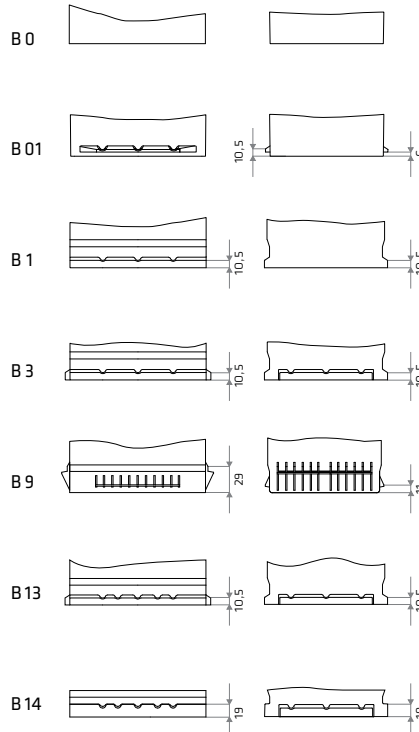
Allowable shelf life (SELFDISCHARGE)



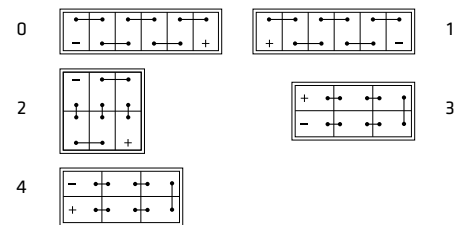
Water consumption (g/Ah)



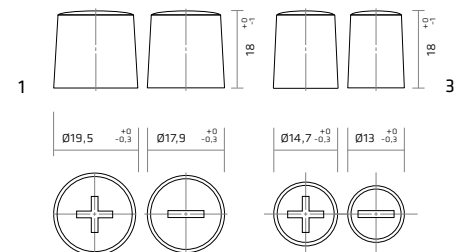
Base hold down



Layout



Terminals



Glossary of remarks

- | | | |
|-------------------------|---------------------------|--------------------------------------|
| K KAMINA | ME MAGIC EYE | SMF MAINTENANCE FREE = SEALED |
| H HANDLE | HD HEAVY DUTY | A POLE ADAPTER |
| KH KAMINA HANDLE | JIS JAPANESE POLES | AGM ABSORBED GLASS MAT |

Starter Vesna Classic is a battery produced using Ca/Ca expanded metal technology - designed for vehicles with entry level of electric equipment but with demand of superior starting, performance and reliability.

Starter Vesna Plus Truck is a battery produced using Sb/Ca expanded metal technology.

- + High starting capabilities
- + Reliable starting at extreme climatic conditions



Starter Vesna Classic

Flooded starter batteries, **Ca/Ca** technology | CAR batteries



Art. №	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
236845	54506	C45	45	L0	400	175×175×190	B13	0	10,7	72/120	K
419036	53649 SMF	C36	36	L1B	330	207×175×175	B13	0	10,2	60/120	SMF, H
419040	53649 SMF	C40	40	L1B	330	207×175×175	B13	0	10,2	60/120	SMF, H
419044	54402 SMF	C44	44	L1B	360	207×175×175	B13	0	10,7	60/120	SMF, H
419144	54403 SMF	C44x	44	L1B	360	207×175×175	B13	1	10,7	60/120	SMF, H
419445	54512 SMF	C45H	45	L1	400	207×175×190	B13	0	12,0	60/100	SMF, H
419845	55001 SMF	C50	50	L2B	450	242×175×175	B13	0	12,9	57/108	SMF, H
419245	55001 SMF	C54	54	L2B	450	242×175×175	B13	0	12,9	57/108	SMF, H
419345	55003 SMF	C54X	54	L2B	450	242×175×175	B13	1	12,9	57/108	SMF, H
419655	55549 SMF	C55H	55	L2	500	242×175×190	B13	0	13,9	57/90	SMF, H
419063	56309 SMF	C63	63	L3B	600	278×175×175	B13	0	15,5	48/80	SMF, H, HD
419263	56309 SMF	C68	68	L3B	600	278×175×175	B13	0	15,5	48/80	SMF, H, HD
419066	56609 SMF	C66H	66	L3	600	278×175×190	B13	0	16,2	48/80	SMF, H, HD
419166	56610 SMF	C66HX	66	L3	600	278×175×190	B13	1	16,2	48/80	SMF, H, HD
419273	56609 SMF	C73H	73	L3	600	278×175×190	B13	0	16,2	48/80	SMF, H, HD
419292	59249 SMF	C92H	92	L4	800	315×175×190	B13	0	20,2	36/60	SMF, H, HD
419478	58803 SMF	C88	88	L5B	720	353×175×175	B13	0	20,0	36/72	SMF, H, HD
419288	58822 SMF	C88H	88	L5	760	353×175×190	B13	0	20,9	36/60	SMF, H, HD
419488	58822 SMF	C97H	97	L5	760	353×175×190	B13	0	20,9	36/60	SMF, H, HD
236110	61002	C11H	110	L6	950	393×175×190	B13	0	25,7	36/60	KH, HD

Starter Vesna Plus Truck

Flooded starter batteries, **Sb/Ca** technology | TRUCK batteries

Art. №	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
236805	61028	SVT11	110	60528	800	344×172×212/234	B0	0	26,2	36/48	H
236605	61028	SVT11P	110	60528	800	345×173×212/233	B1	0	26,2	36/48	H
238810	62047	SVT11M	120	60528	900	344×172×212/234	B0	0	27,9	36/48	H
633912	61044	SVT12	110	MAC110	760	509×175×182/208	B3	3	30,2	24/32	H, HD
236825	62512	SVT12H	125	62512	800	344×172×262/284	B0	0	31,9	24/36	H
618912	63530	SVT13A	135	A	850	513×189×194/220	B0	3	36,8	24/28	H, HD
619912	63544	SVT13M	135	MAC110	850	509×175×182/208	B3	3	34,5	24/32	H, HD
620912	64323	SVT14M	143	MAC143	950	509×218×184/210	B3	3	40,0	21/35	H, HD
621912	65048	SVT15M	150	MAC110	1000	509×175×182/208	B3	3	37,0	24/32	H, HD
622912	67018	SVT17	170	B	1050	507×224×194/218	B0	3	44,3	21/28	H, HD
623912	67019	SVT17R	170	B	1050	507×224×194/218	B0	4	44,3	21/28	H, HD
624912	68032	SVT18	180	B	1100	507×224×194/218	B0	3	46,9	21/28	H, HD
635912	69032	SVT19	190	B	1100	507×224×194/218	B0	3	46,9	21/28	H, HD
625912	70032	SVT20B	200	B	1200	507×224×194/218	B0	3	47,8	21/28	H, HD
626912	70027	SVT20C	200	C	1200	518×273×214/240	B0	3	56,1	18/24	H, HD
627912	72527	SVT22	225	C	1300	518×273×214/240	B0	3	59,9	18/24	H, HD
700712	6TN	SVT10D7	100	D7	720	282×269×208/230	B0	2	31,5	24/36	H, HD
701712	6TLD	SVT12D7	125	D7	900	282×269×208/230	B0	2	34,3	24/36	H, HD

Starter Vesna Plus is a battery produced using Ca/Ca expanded metal technology.

Starter Vesna Plus is real all rounder offering excellent power, capacity, cold start performance and reliability.

This is high quality product for vehicles of every class.

- + Higher starting capabilities
- + Reliable starting at extreme climatic conditions



Starter Vesna Plus

Flooded starter batteries, Ca/Ca technology | CAR batteries



Art. №	DIN marking	JIS marking (OLD/NEW)	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
419035	53520 SMF	NS40ZL SMF/36B20L SMF	PL35J	35	53520	300	196×127×205/226	B0	0	9,5	96/128	SMF, H, JIS
419135	53522 SMF	NS40Z SMF/36B20R SMF	PL35JX	35	53522	300	196×127×205/226	B0	1	9,5	96/128	SMF, H, JIS
419235	53520 SMF	NS40ZL SMF/36B20L SMF	PL35JP	35	53520	300	196×134×205/226	B01	0	9,5	96/128	SMF, H, JIS
419244	54402 SMF		PL44	44	L1B	360	207×175×175	B13	0	10,7	60/120	SMF, H
419344	54403 SMF		PL44X	44	L1B	360	207×175×175	B13	1	10,7	60/120	SMF, H
419046	54502 SMF		PL50	45	L1B	420	207×175×175	B13	0	11,3	60/120	SMF, H
419250	55010 SMF		PL50H	50	L1	450	207×175×190	B13	0	12,4	60/100	SMF, H
419045	54520 SMF	NS60LS BHD	PL45J	45	53520	400	196×134×205/226	B1	0	10,5	72/96	SMF, H, JIS
419145	54522 SMF	NS60S BHD	PL45JX	45	53522	400	196×134×205/226	B1	1	10,5	72/96	SMF, H, JIS
419645	54523/84 SMF	NS60LS SMF/46B24LS SMF	PL45JA	45	54523/84	400	237×127×205/226	B0	0	11,9	72/96	SMF, H, JIS, A
419745	54524/51 SMF	NS60S SMF/46B24RS SMF	PL45JAX	45	54524/51	400	237×127×205/226	B0	1	11,9	72/96	SMF, H, JIS, A
419855	55523/84 SMF		PL55JA	55	54523/84	540	237×127×205/226	B0	0	13,7	72/96	SMF, H, JIS, A
419755	55524/51 SMF		PL55JAX	55	54524/51	540	237×127×205/226	B0	1	13,7	72/96	SMF, H, JIS, A
419255	55509 SMF		PL55	55	L2B	500	242×175×175	B13	0	13,5	57/108	SMF, H
419355	55508 SMF		PL55X	55	L2B	500	242×175×175	B13	1	13,5	57/108	SMF, H
419260	56009 SMF		PL60	60	L2B	550	242×175×175	B13	0	14,0	57/108	SMF, H
419262	56008 SMF		PL60H	60	L2	600	242×175×190	B13	0	14,4	57/90	SMF, H
419362	56013 SMF		PL60HX	60	L2	600	242×175×190	B13	1	14,4	57/90	SMF, H
419060	56068 SMF	N50ZL SMF/55D23L SMF	PL60J	60	56068	600	230×172×200/220	B01	0	14,9	60/90	SMF, H
419160	56069 SMF	N50Z SMF/55D23R SMF	PL60JX	60	56069	600	230×172×200/220	B01	1	14,9	60/90	SMF, H
419865	56568 SMF		PL65J	65	56068	650	230×172×200/220	B01	0	15,4	60/90	SMF, H
419965	56569 SMF		PL65JX	65	56069	650	230×172×200/220	B01	1	15,4	60/90	SMF, H
419073	57309 SMF		PL73	73	L3B	630	278×175×175	B13	0	15,9	48/80	SMF, H, HD
419074	57412 SMF		PL74H	74	L3	680	278×175×190	B13	0	17,4	48/80	SMF, H, HD
419174	57413 SMF		PL74HX	74	L3	680	278×175×190	B13	1	17,4	48/80	SMF, H, HD
419270	57029 SMF	NS70L SMF/65D26L SMF	PL70J	70	57029	700	269×173×198/218	B9	0	16,8	48/80	SMF, H
419370	57024 SMF	NS70 SMF/65D26R SMF	PL70JX	70	57024	700	269×173×198/218	B9	1	16,8	48/80	SMF, H
419875	57529 SMF		PL75J	75	57029	740	269×173×198/218	B9	0	17,1	48/80	SMF, H
419775	57524 SMF		PL75JX	75	57024	740	269×173×198/218	B9	1	17,1	48/80	SMF, H
419092	59220 SMF		PL92	92	L5B	850	353×175×175	B13	0	21,1	36/72	SMF, H, HD
419192	59221 SMF		PL92X	92	L5B	850	353×175×175	B13	1	21,1	36/72	SMF, H, HD
419099	59944 SMF		PL10H	99	L5	850	353×175×190	B13	0	21,6	36/60	SMF, H, HD
419295	59518 SMF	NX120-7L SMF/105D31L SMF	PL10J	95	59518	850	303×174×198/218	B01	0	20,6	42/70	SMF, H
419395	59519 SMF	NX120-7 SMF/105D31R SMF	PL10JX	95	59519	850	303×174×198/218	B01	1	20,6	42/70	SMF, H

Starter Vesna Ultra 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



Starter Vesna Ultra

Flooded starter batteries, Ca/Ca technology | CAR batteries



Art. №	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
419254	55401 SMF	U54	54	L1B	510	207×175×175	B13	0	12,3	60/120	SMF, ME, H
419455	55510 SMF	U55H	55	L1	560	207×175×190	B13	0	13,4	60/100	SMF, ME, H
419062	56249 SMF	U62	62	L2B	600	242×175×175	B13	0	14,6	57/108	SMF, ME, H
419266	56649 SMF	U66H	66	L2	640	242×175×190	B13	0	15,0	57/90	SMF, ME, H
419075	57510 SMF	U75	75	L3B	720	278×175×175	B13	0	17,1	48/80	SMF, ME, H, HD
419275	57549 SMF	U75H	75	L3	750	278×175×190	B13	0	17,8	48/80	SMF, ME, H, HD
419082	58514 SMF	U85	85	L4B	800	315×175×175	B13	0	19,0	36/72	SMF, ME, H, HD
419095	60032 SMF	U100	100	L5B	900	353×175×175	B13	0	22,2	36/72	SMF, ME, H, HD
419100	60044 SMF	U100H	100	L5	920	353×175×190	B13	0	22,4	36/60	SMF, ME, H, HD

Starter Vesna Ultra Truck

Flooded starter batteries, Ca/Ca technology | TRUCK batteries

Art. №	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
217612	64030 SMF	STM13M	135	MAC110	850	509×175×182/208	B3	3	34,9	24/40	SMF, ME, H, HD
233612	63544 SMF	STM14	140	A	850	513×189×194/220	B0	3	36,8	24/35	SMF, ME, H, HD
219612	65048 SMF	STM15M	150	MAC110	1000	509×175×182/208	B3	3	37,0	24/40	SMF, ME, H, HD
218612	65018 SMF	STM15	150	B	950	512×222×202/229	B0	3	41,0	24/32	SMF, ME, H, HD
220612	67018 SMF	STM17	170	B	1050	512×222×202/229	B0	3	44,3	21/28	SMF, ME, H, HD
221612	70027 SMF	STM20	200	C	1200	513×275×220/247	B0	3	56,1	18/24	SMF, ME, H, HD
222612	72527 SMF	STM22	225	C	1300	513×275×220/247	B0	3	61,3	18/24	SMF, ME, H, HD

OUR CONTRIBUTION T



Starter 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



Starter Vesna Ultra EFB Stop & Go

Flooded starter batteries, Ca/Ca technology | CAR batteries



Art. N°	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
313260	56088 SMF	SSG60	60	L2	580	242×175×190	B13	0	17,0	57/90	SMF, ME, H
313265	56588 SMF	SSG65	65	L3B	650	278×175×175	B13	0	18,0	48/80	SMF, ME, H, HD
313470	57088 SMF	SSG70	70	L3	680	278×175×190	B13	0	19,5	48/80	SMF, ME, H, HD
313280	58088 SMF	SSG80	80	L4	760	315×175×190	B13	0	22,0	36/60	SMF, ME, H, HD
313290	59088 SMF	SSG90	90	L5	850	353×175×190	B13	0	25,0	36/60	SMF, ME, H, HD

LOW CO₂ EMISSIONS



Starter 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



Starter Vesna Ultra AGM Stop & Go

Flooded starter batteries, Ca/Ca technology | CAR batteries



OEM
Nano
AGM

Art. N°	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
314260	L2 AGM ED	SAG60	60	L2	680	242×175×190	B13	0	18,5	57/90	AGM, H
314270	L3 AGM ED	SAG70	70	L3	760	278×175×190	B13	0	21,0	48/80	AGM, H
314285	L4 AGM ED	SAG80	80	L4	800	315×175×190	B13	0	24,0	36/60	AGM, H
314290	L5 AGM ED	SAG95	95	L5	850	353×175×190	B13	0	27,0	36/60	AGM, H

