

VESNA STARTER BATTERIES



Vesna Basic
Vesna Power Truck
Vesna Power
Vesna Premium
Vesna Premium Truck
Vesna Premium EFB Stop & Go
Vesna Premium AGM Stop & Go

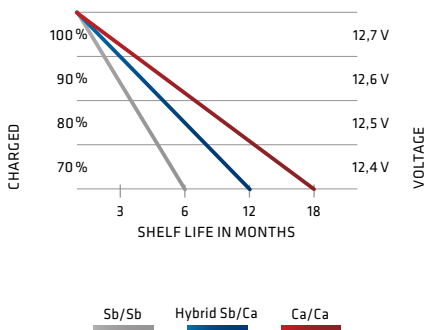
Brand **Vesna** is produced in TAB d.d. company. **TAB was established in 1965** as a subsidiary of Lead Mine Mežica Holding in a region where different lead activities are more than 350 years old. Nowadays, TAB is producing a wide range of lead acid flooded, VRLA AGM and VRLA Gel batteries.

**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 50 YEARS.**

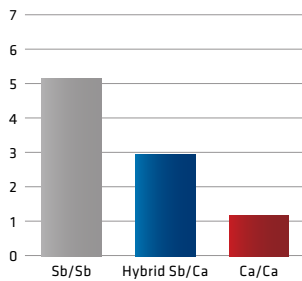
TAB Tovarna Akumulatorskih Baterij d. d., Polena 6, SI-2392 Mežica, Slovenia | info@tab.si | +386 (0)2 8702 300 | www.tab.si



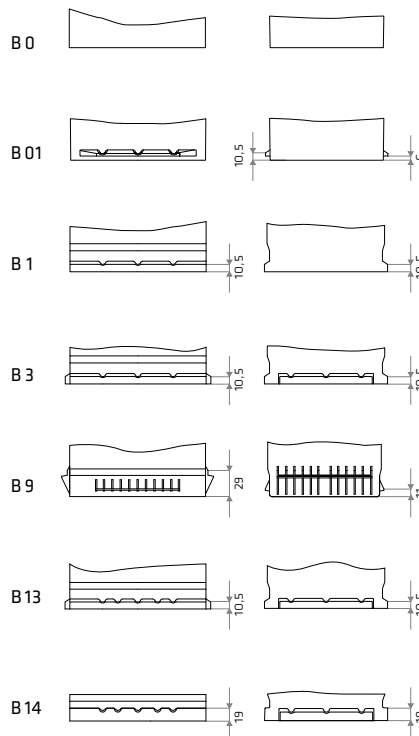
Allowable shelf life (SELFDISCHARGE)



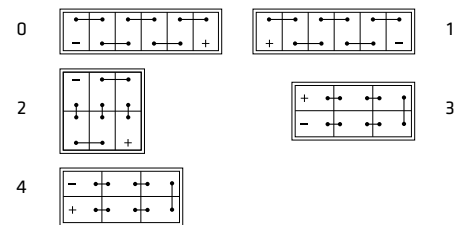
Water consumption (g/Ah)



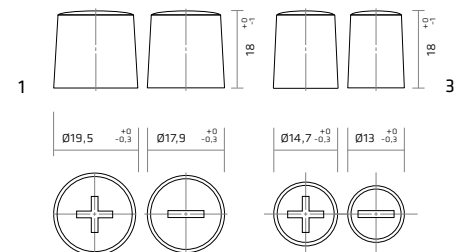
Base hold down



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 |

Vesna Basic 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.

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

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



Vesna Basic

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
235845	54506	B45	45	L0	400	175×175×190	B13	0	10,7	72/120	K
415036	53649 SMF	B36	36	L1B	330	207×175×175	B13	0	10,2	60/120	SMF, H
415040	53649 SMF	B40	40	L1B	330	207×175×175	B13	0	10,2	60/120	SMF, H
415044	54402 SMF	B44	44	L1B	360	207×175×175	B13	0	10,7	60/120	SMF, H
415144	54403 SMF	B44X	44	L1B	360	207×175×175	B13	1	10,7	60/120	SMF, H
415445	54512 SMF	B45H	45	L1	400	207×175×190	B13	0	12,0	60/100	SMF, H
415845	55001 SMF	B50	50	L2B	450	242×175×175	B13	0	12,9	57/108	SMF, H
415245	55001 SMF	B54	54	L2B	450	242×175×175	B13	0	12,9	57/108	SMF, H
415345	55003 SMF	B54X	54	L2B	450	242×175×175	B13	1	12,9	57/108	SMF, H
415655	55549 SMF	B55H	55	L2	500	242×175×190	B13	0	13,9	57/90	SMF, H
415863	56309 SMF	B63	63	L3B	600	278×175×175	B13	0	15,5	48/80	SMF, H, HD
415263	56309 SMF	B68	68	L3B	600	278×175×175	B13	0	15,5	48/80	SMF, H, HD
415066	56609SMF	B66H	66	L3	600	278×175×190	B13	0	16,2	48/80	SMF, H, HD
415166	56608SMF	B66HX	66	L3	600	278×175×190	B13	1	16,2	48/80	SMF, H, HD
415273	56609 SMF	B73H	73	L3	600	278×175×190	B13	0	16,2	48/80	SMF, H, HD
415292	59249 SMF	B92H	92	L4	800	315×175×190	B13	0	20,2	36/60	SMF, H, HD
415478	58803 SMF	B88	88	L5B	720	353×175×175	B13	0	20,0	36/72	SMF, H, HD
415088	58822 SMF	B88H	88	L5	760	353×175×190	B13	0	20,9	36/60	SMF, H, HD
415488	58822 SMF	B97H	97	L5	760	353×175×190	B13	0	20,9	36/60	SMF, H, HD
235110	61002	B11H	110	L6	1000	393×175×190	B13	0	25,7	36/60	KH, HD

Vesna Power 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
235805	61028	VT11	110	60528	800	344×172×212/234	B0	0	26,2	36/48	H
235605	61028	VT11P	110	60528	800	345×173×212/233	B1	0	26,2	36/48	H
632912	61044	VT11M	110	MAC110	760	509×175×182/208	B3	3	30,2	24/32	H, HD
240810	62047	VT12	120	60528	900	344×172×212/234	B0	0	27,9	36/48	H
235825	62512	VT12H	125	62512	800	344×172×262/284	B0	0	31,9	24/36	H
606912	63530	VT13A	135	A	850	513×189×194/220	B0	3	36,4	24/35	H, HD
607912	63544	VT13M	135	MAC110	850	509×175×182/208	B3	3	34,3	24/32	H, HD
608912	64323	VT14M	143	MAC143	950	509×218×184/210	B3	3	39,4	21/35	H, HD
611912	65048	VT15M	150	MAC110	1000	509×175×182/208	B3	3	36,9	24/32	H, HD
612912	67018	VT17	170	B	1050	507×224×194/218	B0	3	43,7	21/28	H, HD
613912	67019	VT17R	170	B	1050	507×224×194/218	B0	4	43,7	21/28	H, HD
614912	68032	VT18	180	B	1100	507×224×194/218	B0	3	45,0	21/28	H, HD
634912	69032	VT19	190	B	1100	507×224×194/218	B0	3	45,0	21/28	H, HD
615912	70032	VT20B	200	B	1200	507×224×194/218	B0	3	45,8	21/28	H, HD
616912	70027	VT20C	200	C	1200	518×273×214/240	B0	3	53,8	18/24	H, HD
617912	72527	VT22	225	C	1300	518×273×214/240	B0	3	57,2	18/24	H, HD
600712	6TN	VT10D7	100	D7	720	282×269×208/230	B0	2	31,5	24/36	H, HD
601712	6TLD	VT12D7	125	D7	900	282×269×208/230	B0	2	34,3	24/36	H, HD

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



Vesna Power

Flooded starter batteries, Ca/Ca technology | CAR batteries



OEM
Nano
SMF

Art. №	DIN marking	JIS marking (OLD/NEW)	Short code	C20 (Ah)	Box Type	EN (A)	LxWxH (mm)	BHD	Layout	Weight (kg)	PCS/Pallet (EUR/CNT)	Remarks
415035	53520 SMF	NS40ZL SMF/36B20L SMF	P035J	35	53520	300	196x127x205/226	B0	0	9,5	96/128	SMF, H, JIS
415135	53522 SMF	NS40Z SMF/36B20R SMF	P035JX	35	53522	300	196x127x205/226	B0	1	9,5	96/128	SMF, H, JIS
415235	53520 SMF	NS40ZL SMF/36B20L SMF	P035JP	35	53520	300	196x134x205/226	B01	0	9,5	96/128	SMF, H, JIS
415244	54402 SMF		P044	44	L1B	360	207x175x175	B13	0	10,7	60/120	SMF, H
415344	54403 SMF		P044X	44	L1B	360	207x175x175	B13	1	10,7	60/120	SMF, H
415046	54502 SMF		P050	45	L1B	420	207x175x175	B13	0	11,3	60/120	SMF, H
415250	55010 SMF		P050H	50	L1	450	207x175x190	B13	0	12,4	60/100	SMF, H
415045	54520 SMF	NS60LS BHD	P045J	45	53520	400	196x134x205/226	B1	0	10,5	72/96	SMF, H, JIS
415145	54522 SMF	NS60S BHD	P045JX	45	53522	400	196x134x205/226	B1	1	10,5	72/96	SMF, H, JIS
415645	54523/84 SMF	NS60LS SMF/46B24LS SMF	P045JA	45	54523/84	400	237x127x205/226	B0	0	11,9	72/96	SMF, H, JIS, A
415745	54524/51 SMF	NS60S SMF/46B24RS SMF	P045JAX	45	54524/51	400	237x127x205/226	B0	1	11,9	72/96	SMF, H, JIS, A
415855	55523/84 SMF		P055JA	55	54523/84	540	237x127x205/226	B0	0	13,7	72/96	SMF, H, JIS, A
415755	55524/51 SMF		P055JAX	55	54524/51	540	237x127x205/226	B0	1	13,7	72/96	SMF, H, JIS, A
415255	55509 SMF		P055	55	L2B	500	242x175x175	B13	0	13,5	57/108	SMF, H
415355	55508 SMF		P055X	55	L2B	500	242x175x175	B13	1	13,5	57/108	SMF, H
415260	56009 SMF		P060	60	L2B	550	242x175x175	B13	0	14,0	57/108	SMF, H
415262	56008 SMF		P060H	60	L2	600	242x175x190	B13	0	14,4	57/90	SMF, H
415362	56010 SMF		P060HX	60	L2	600	242x175x190	B13	1	14,4	57/90	SMF, H
415060	56068 SMF	N50ZL SMF/55D23L SMF	P060J	60	56068	600	230x172x200/220	B01	0	14,9	60/90	SMF, H
415160	56069 SMF	N50Z SMF/55D23R SMF	P060JX	60	56069	600	230x172x200/220	B01	1	14,9	60/90	SMF, H
415865	56568 SMF		P065J	65	56068	650	230x172x200/220	B01	0	15,4	60/90	SMF, H
415965	56569 SMF		P065JX	65	56069	650	230x172x200/220	B01	1	15,4	60/90	SMF, H
415073	57309 SMF		P073	73	L3B	630	278x175x175	B13	0	15,9	48/80	SMF, H, HD
415074	57412 SMF		P074H	74	L3	680	278x175x190	B13	0	17,4	48/80	SMF, H, HD
415174	57413 SMF		P074HX	74	L3	680	278x175x190	B13	1	17,4	48/80	SMF, H, HD
415270	57029 SMF	NS70L SMF/65D26L SMF	P070J	70	57029	700	269x173x198/218	B9	0	16,8	48/80	SMF, H
415370	57024 SMF	NS70 SMF/65D26R SMF	P070JX	70	57024	700	269x173x198/218	B9	1	16,8	48/80	SMF, H
415875	57529 SMF		P075J	75	57029	740	269x173x198/218	B9	0	17,1	48/80	SMF, H
415775	57524 SMF		P075JX	75	57024	740	269x173x198/218	B9	1	17,1	48/80	SMF, H
415092	59220 SMF		P092	92	L5B	850	353x175x175	B13	0	21,1	36/72	SMF, H, HD
415192	59221 SMF		P092X	92	L5B	850	353x175x175	B13	1	21,1	36/72	SMF, H, HD
415099	59944 SMF		P092H	99	L5	850	353x175x190	B13	0	21,6	36/60	SMF, H, HD
415295	59518 SMF	Nx120-7L SMF/105D31L SMF	P095J	95	59518	850	303x174x198/218	B01	0	20,6	42/70	SMF, H
415395	59519 SMF	Nx120-7 SMF/105D31R SMF	P095JX	95	59519	850	303x174x198/218	B01	1	20,6	42/70	SMF, H

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



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
415254	55401 SMF	PR54	54	L1B	510	207×175×175	B13	0	12,3	60/120	SMF, ME, H
415455	55510 SMF	PR55H	55	L1	560	207×175×190	B13	0	13,4	60/100	SMF, ME, H
415062	56249 SMF	PR62	62	L2B	600	242×175×175	B13	0	14,6	57/108	SMF, ME, H
415266	56649 SMF	PR66H	66	L2	640	242×175×190	B13	0	15,0	57/90	SMF, ME, H
415075	57510 SMF	PR75	75	L3B	720	278×175×175	B13	0	17,1	48/80	SMF, ME, H, HD
415275	57549 SMF	PR75H	75	L3	750	278×175×190	B13	0	17,8	48/80	SMF, ME, H, HD
415082	58514 SMF	PR85	85	L4B	800	315×175×175	B13	0	19,0	36/72	SMF, ME, H, HD
415095	60032 SMF	PR100	100	L5B	900	353×175×175	B13	0	22,2	36/72	SMF, ME, H, HD
415100	60044 SMF	PR100H	100	L5	920	353×175×190	B13	0	22,4	36/60	SMF, ME, H, HD

Vesna Premium 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
188612	63544 SMF	VTP13M	135	MAC110	850	509×175×182/208	B3	3	34,9	24/40	SMF, ME, H, HD
232612	64030 SMF	VTP14	140	A	850	513×189×194/220	B0	3	36,8	24/35	SMF, ME, H, HD
189612	65048 SMF	VTP15M	150	MAC110	1000	509×175×182/208	B3	3	36,9	24/40	SMF, ME, H, HD
190612	65018 SMF	VTP15	150	B	950	512×222×202/229	B0	3	40,4	24/32	SMF, ME, H, HD
191612	67018 SMF	VTP17	170	B	1050	512×222×202/229	B0	3	43,7	21/28	SMF, ME, H, HD
192612	70027 SMF	VTP20	200	C	1200	513×275×220/247	B0	3	53,8	18/24	SMF, ME, H, HD
193612	72527 SMF	VTP22	225	C	1300	513×275×220/247	B0	3	57,2	18/24	SMF, ME, H, HD

OUR CONTRIBUTION T



Vesna Premium 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 Premium 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
312060	56088 SMF	VSG60	60	L2	580	242×175×190	B13	0	17,0	57/90	SMF, ME, H
313065	56588 SMF	VSG65	65	L3B	650	278×175×175	B13	0	18,0	48/96	SMF, ME, H, HD
313070	57088 SMF	VSG70	70	L3	680	278×175×190	B13	0	19,5	48/80	SMF, ME, H, HD
313080	58088 SMF	VSG80	80	L4	760	315×175×190	B13	0	22,0	36/60	SMF, ME, H, HD
313090	59088 SMF	VSG90	90	L5	850	353×175×190	B13	0	25,0	36/60	SMF, ME, H, HD

LOW CO₂ EMISSIONS



Vesna Premium 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 Premium 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
314060	L2 AGM ED	VAG60	60	L2	680	242×175×190	B13	0	18,5	57/90	AGM, H
314070	L3 AGM ED	VAG70	70	L3	760	278×175×190	B13	0	21,0	48/80	AGM, H
314085	L4 AGM ED	VAG80	80	L4	800	315×175×190	B13	0	24,0	36/60	AGM, H
314090	L5 AGM ED	VAG95	95	L5	850	353×175×190	B13	0	27,0	36/60	AGM, H

