

TOPLA STARTER BATTERIES



topla

TOPLA Start
TOPLA Energy
TOPLA Energy Truck
TOPLA Top
TOPLA Top JIS
TOPLA Top Sealed Truck
TOPLA Top EFB Stop & Go
TOPLA Top AGM Stop & Go



Brand Topla 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 FOR 50 YEARS.



Glossary of remarks

K KAMINA
H HANDLE
KH KAMINA HANDLE

ME MAGIC EYE
HD HEAVY DUTY
JIS JAPANESE POLES

SMF MAINTENANCE FREE = SEALED
A POLE ADAPTER
AGM ABSORBED GLASS MAT

TOPLA START 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.

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

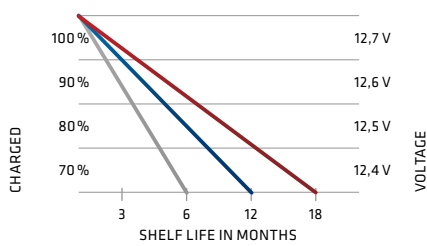


TOPLA START

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

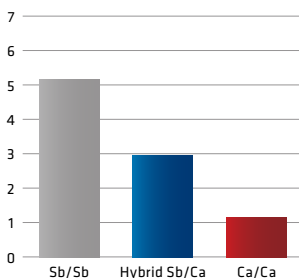
Art. №	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
120044	54502 SMF	TS44	44	L1B	390	207×175×175	B13	0	11,3	60/120	SMF, H, B
120054	55509 SMF	TS54	54	L2B	480	242×175×175	B13	0	13,5	57/108	SMF, H, B
120074	57412 SMF	TS74H	74	L3	680	278×175×190	B13	0	17,4	48/80	SMF, H, HD
120099	60044 SMF	TS99h	99	L5	850	353×175×190	B13	0	21,9	36/60	SMF, ME, H, HD

Allowable shelf life (SELFDISCHARGE)

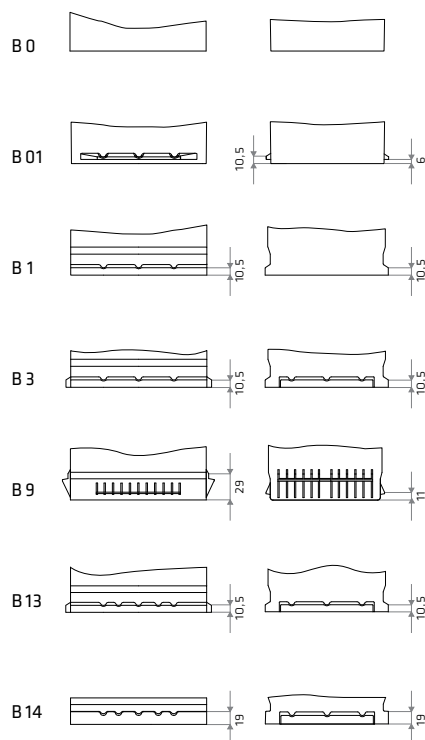


Sb/Sb Hybrid Sb/Ca Ca/Ca

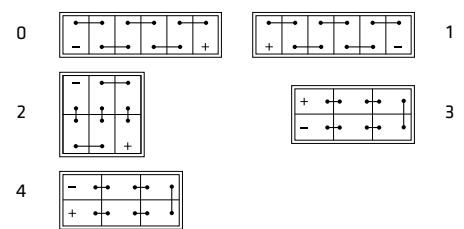
Water consumption (g/Ah)



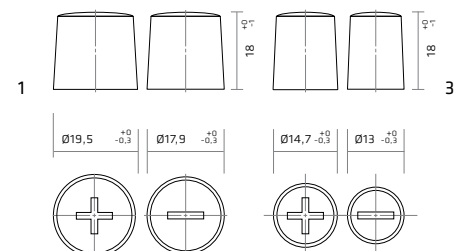
Base hold down



Layout



Terminals



TOPLA ENERGY is a battery produced using Ca/Ca expanded metal technology.
TOPLA ENERGY is real all rounder offering excellent power, capacity, cold start performance and reliability.
 This is high quality product for vehicles of every class.
TOPLA ENERGY TRUCK is a battery produced using Sb/Ca expanded metal technology.

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



TOPLA ENERGY

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

Art. Nº	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	LxWxH (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
108845	54506	E45H	45	L0	400	175x175x190	B13	0	10,7	72/120	K
108045	54502	E45	45	L1B	420	207x175x175	B13	0	11,3	60/120	K H
108345	54403 SMF	E45X	45	L1B	420	207x175x175	B13	1	10,7	60/120	SMF, H, B
108050	55010	E50H	50	L1	480	207x175x190	B13	0	12,4	60/100	H
108660	56077	E60U	60	L1 UNI	510	207x175x190	B13	UNI	13,7	60/100	H, UNI
108055	56009	E55	55	L2B	550	242x175x175	B13	0	14,0	57/108	K H
108155	55558	E55X	55	L2B	550	242x175x175	B13	1	14,0	57/108	K H
108060	56008	E60H	60	L2	600	242x175x190	B13	0	14,4	57/90	K H
108160	56265	E60X	60	L2	600	242x175x190	B13	1	14,4	57/90	K H
108066	56649	E66H	66	L2	620	242x175x190	B13	0	15,0	57/90	K H
108073	57309	E73	73	L3B	630	278x175x175	B13	0	15,9	48/80	KH, HD
108075	57549	E75	75	L3	750	278x175x190	B13	0	17,8	48/80	KH, HD
108175	57413 SMF	E75X	75	L3	700	278x175x190	B13	1	17,4	48/80	SMF, H, HD, B
108000	59249	E100V	100	L4	800	315x175x190	B13	0	20,2	36/60	KH, HD
108092	59220	E92	92	L5B	850	353x175x175	B13	0	21,1	36/72	KH, HD
108192	59221 SMF	E92X	92	L5B	850	353x175x175	B13	1	21,1	36/72	SMF, H, HD, B
108400	60044	E100H	100	L5	920	353x175x190	B13	0	22,4	36/60	KH, HD
108210	61002	E11H	110	L6	1000	394x175x190	B13	0	25,7	36/60	KH, HD

TOPLA ENERGY TRUCK

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

Art. Nº	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	LxWxH (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
177110	61028	ET11	110	60528	800	345x173x212/233	B0	0	26,2	36/48	H
177410	61028	ET11P	110	60528	800	345x173x212/233	B1	0	26,2	36/48	H
167912	61044	ET11M	110	MAC 110	760	509x175x182/208	B3	3	30,2	24/40	H, HD
108910	62047	ET12	120	60528	900	345x173x212/233	B0	0	27,9	36/48	H
177125	62512	ET12H	125	62512	800	345x173x263/284	B0	0	31,9	24/36	H
177235	63512	ET13H	135	62512	800	345x173x263/284	B0	0	31,9	24/36	H
397912	63530	ET13	135	A	850	513x189x194/220	B0	3	36,4	24/35	H, HD
163912	63544	ET13M	135	MAC 110	850	509x175x182/208	B3	3	34,3	24/32	H, HD
520912	64323	ET14M	143	MAC 143	950	509x218x184/210	B3	3	39,4	21/35	H, HD
164912	65048	ET15M	150	MAC 110	1000	509x175x182/208	B3	3	36,9	24/32	H, HD
548912	68032	ET18	180	B	1100	512x223x194/220	B0	3	45,0	21/28	H, HD
533912	69032	ET19	190	B	1200	512x223x194/220	B0	3	45,0	21/28	H, HD
166912	70032	ET20B	200	B	1200	512x223x194/220	B0	3	45,8	21/28	H, HD
129912	70027	ET20C	200	C	1200	518x273x214/240	B0	3	53,8	18/24	H, HD
603912	72527	ET22	225	C	1300	518x273x214/240	B0	3	57,2	18/24	H, HD

TOPLA TOP 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



TOPLA TOP

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

Art. Nº	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
118654	55401 SMF	TT54	54	L1B	510	207×175×175	B13	0	12,3	60/120	SMF, ME, H
118655	55510 SMF	TT55H	55	L1	550	207×175×190	B13	0	13,4	60/100	SMF, ME, H
118662	56249 SMF	TT62	62	L2B	600	242×175×175	B13	0	14,6	57/108	SMF, ME, H
118666	56649 SMF	TT66H	66	L2	640	242×175×190	B13	0	15,0	57/90	SMF, ME, H
118072	57510 SMF	TT75	75	L3B	720	278×175×175	B13	0	17,1	48/80	SMF, ME, H, HD
118678	57549 SMF	TT78H	78	L3	780	278×175×190	B13	0	17,8	48/80	SMF, ME, H, HD
118685	58514 SMF	TT85	85	L4B	800	315×175×175	B13	0	19,0	36/72	SMF, ME, H, HD
118600	60032 SMF	TT100	100	L5B	950	353×175×175	B13	0	22,2	36/72	SMF, ME, H, HD

TOPLA TOP JIS

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

Art. Nº	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
118835	53520 SMF	NS40ZL SMF/36B20L SMF	TT35J	35	53520	300	196×127×205/226	B0	0	9,5	96/128	SMF, H, JIS
118935	53522 SMF	NS40Z SMF/36B20R SMF	TT35JX	35	53522	300	196×127×205/226	B0	1	9,5	96/128	SMF, H, JIS
118735	53520 SMF	NS40ZL SMF/36B20L SMF	TT35JP	35	53520	300	196×134×205/226	B01	0	9,5	96/128	SMF, H, JIS
118245	54520 SMF	NS60LS BHD	TT45J	45	53520	400	196×134×205/226	B1	0	10,5	72/96	/
118145	54522 SMF	NS60S BHD	TT45JX	45	53522	400	196×134×205/226	B1	1	10,5	72/96	/
118845	54523/84 SMF	NS60LS SMF/46B24LS SMF	TT45JA	45	54523/84	400	237×127×205/226	B0	0	11,9	72/96	SMF, H, JIS, A
118945	54524/51 SMF	NS60S SMF/46B24RS SMF	TT45JAX	45	54524/51	400	237×127×205/226	B0	1	11,9	72/96	SMF, H, JIS, A
118255	55523/84 SMF		TT55J	55	54523/84	540	237×127×205/226	B0	0	13,7	72/96	SMF, H, JIS, A
118355	55524/51 SMF		TT55JX	55	54524/51	540	237×127×205/226	B0	1	13,7	72/96	SMF, H, JIS, A
118860	56068 SMF	NS0ZL SMF/55D23L SMF	TT60J	60	56068	600	230×172×200/220	B01	0	14,9	60/90	SMF, H
118960	56069 SMF	NS0Z SMF/55D23R SMF	TT60JX	60	56069	600	230×172×200/220	B01	1	14,9	60/90	SMF, H
118665	56568 SMF		TT65J	65	56068	650	230×172×200/220	B01	0	15,4	60/90	SMF, H
118765	56569 SMF		TT65JX	65	56069	650	230×172×200/220	B01	1	15,4	60/90	SMF, H
118870	57029 SMF	NS70L SMF/65D26L SMF	TT70J	70	57029	700	269×173×198/218	B9	0	16,8	48/80	SMF, H
118970	57024 SMF	NS70 SMF/65D26R SMF	TT70JX	70	57024	700	269×173×198/218	B9	1	16,8	48/80	SMF, H
118875	57529 SMF		TT75J	75	57029	740	269×173×198/218	B9	0	17,1	48/80	SMF, H
118975	57524 SMF		TT75JX	75	57024	740	269×173×198/218	B9	1	17,1	48/80	SMF, H
118895	59518 SMF	N×120-7L SMF/105D31L SMF	TT95J	95	59518	850	303×174×198/218	B01	0	20,6	42/70	SMF, H
118995	59519 SMF	N×120-7 SMF/105D31R SMF	TT95JX	95	59519	850	303×174×198/218	B01	1	20,6	42/70	SMF, H
118005	60518 SMF		TT10J	105	59518	900	303×174×198/218	B01	0	21,7	42/70	SMF, H, HD
118305	60519 SMF		TT10JX	105	59519	900	303×174×198/218	B01	1	21,7	42/70	SMF, H, HD

TOPLA TOP SEALED TRUCK

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

Art. Nº	DIN marking	Short code	C20 (Ah)	Box Type	EN (A)	L×W×H (mm)	BHD	Layout	Weight (kg)	PCS per Pallet (EUR/CNT)	Remarks
243612	63544 SMF	TT13M	135	MAC110	850	509×175×182/208	B3	3	34,9	24/40	SMF, ME, H, HD
231612	64030 SMF	TT14	140	A	850	513×189×194/220	B0	3	36,8	24/35	SMF, ME, H, HD
216612	65048 SMF	TT15M	150	MAC110	1000	509×175×182/208	B3	3	36,9	24/40	SMF, ME, H, HD
244612	65018 SMF	TT15	150	B	950	512×222×202/229	B0	3	40,4	24/32	SMF, ME, H, HD
245612	67018 SMF	TT17	170	B	1050	512×222×202/229	B0	3	43,7	21/28	SMF, ME, H, HD
258612	67018 SMF	TT18	180	B	1050	512×222×202/229	B0	3	43,7	21/28	SMF, ME, H, HD
223612	70027 SMF	TT20	200	C	1200	513×275×220/247	B0	3	53,8	18/24	SMF, ME, H, HD
125612	72527 SMF	TT22	225	C	1300	513×275×220/247	B0	3	57,2	18/24	SMF, ME, H, HD

OUR CONTRIBUTION T



TOPLA TOP 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



TOPLA TOP 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
112060	56088 SMF	TSG60	60	L2	580	242×175×190	B13	0	17,0	57/90	SMF, ME, H
112065	56588 SMF	TSG65	65	L3B	650	278×175×175	B13	0	18,0	48/96	SMF, ME, H, HD
112070	57088 SMF	TSG70	70	L3	680	278×175×190	B13	0	19,5	48/80	SMF, ME, H, HD
112080	58088 SMF	TSG80	80	L4	760	315×175×190	B13	0	22,0	36/60	SMF, ME, H, HD
112090	59088 SMF	TSG90	90	L5	850	353×175×190	B13	0	25,0	36/60	SMF, ME, H, HD

LOW CO₂ EMISSIONS

TOPLA TOP 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



TOPLA TOP AGM 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
114060	L2 AGM ED	TAG60	60	L2	680	242×175×190	B13	0	18,5	57/90	AGM, H
114070	L3 AGM ED	TAG70	70	L3	760	278×175×190	B13	0	21,0	48/80	AGM, H
114080	L4 AGM ED	TAG80	80	L4	800	315×175×190	B13	0	24,0	36/60	AGM, H
114090	L5 AGM ED	TAG95	95	L5	850	353×175×190	B13	0	27,0	36/60	AGM, H

L0
175×175×190



L1B
207×175×175



L1
207×175×190



L2B
242×175×175



L2
242×175×190



L3B
278×175×175



L3
278×175×190



L4B
315×175×175



L4
315×175×190



L5B
353×175×175



L5
353×175×190



L6
394×175×190



53520, 53522
196×121×205/226



54523/84, 54524/51
237×127×205/226



56068, 56069
230×172×200/220



57024, 57029
269×173×198/218



59518, 59519
303×174×227



60528 B0
345×173×212/233



60528 B01
345×173×212/233



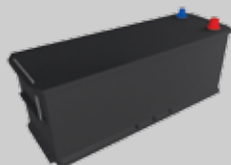
62512
345×173×263/284



MAC 110
509×175×182/208



MAC110 SMF
509×175×182/208



MAC143
509×218×184/210



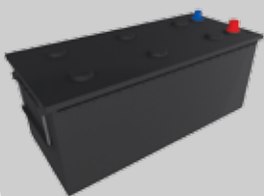
A
513×189×194/220



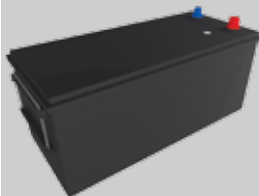
A SMF
513×189×194/220



B
512×223×194/220



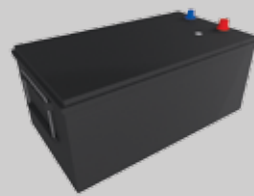
B SMF
512×222×202/229



C
518×273×214/240



C SMF
513×275×220/247



D7
282×269×208/230

