

MAINTENANCE FREE

HIGH PERFORMANCE BATTERIES



ISO 9001 Certified
ISO/TS 16949 Certified



▼ JIS Battery Specification

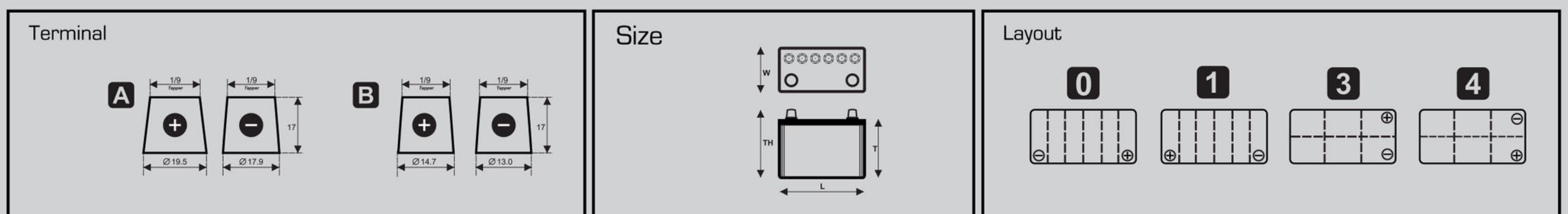


OLD JIS	NEW JIS	VOLT (V)	CAPACITY		RESERVE CAPACITY (min.)	CCA SAE (Amp) at -18°C	DIMENSION (mm)				CELL LAYOUT	HANDLE	TERMINAL SHAPE
			20 HR (Ah)	5 HR (Ah)			LENGTH	WIDTH	HEIGHT	TOTAL HEIGHT			
NS40	32B20R	12	32	26	47	300	195	127	201	224	1	MOVE	B
NS40L	32B20L	12	32	26	47	300	195	127	201	224	0	MOVE	B
NS40S	32B20RS	12	32	26	47	300	195	127	201	224	1	MOVE	A
NS40LS	32B20LS	12	32	26	47	300	195	127	201	224	0	MOVE	A
NS40Z	36B20R	12	35	28	58	350	195	127	201	224	1	MOVE	B
NS40ZL	36B20L	12	35	28	58	350	195	127	201	224	0	MOVE	B
NS40ZS	36B20RS	12	35	28	58	350	195	127	201	224	1	MOVE	A
NS40ZLS	36B20LS	12	35	28	58	350	195	127	201	224	0	MOVE	A
N40	32C24R	12	40	32	58	350	236	128	200	223	1	MOVE	A
N40L	32C24L	12	40	32	58	350	236	128	200	223	0	MOVE	A
NS60	46B24R	12	45	36	75	400	236	128	200	223	1	MOVE	B
NS60L	46B24L	12	45	36	75	400	236	128	200	223	0	MOVE	B
NS60S	46B24RS	12	45	36	75	400	236	128	200	223	1	MOVE	A
NS60LS	46B24LS	12	45	36	75	400	236	128	200	223	0	MOVE	A
	55D23R	12	60	48	95	500	233	172	201	224	1	MOVE	A
	55D23L	12	60	48	95	500	233	172	201	224	0	MOVE	A
N50	48D26R	12	50	40	75	400	258	173	201	224	1	MOVE	A
N50L	48D26L	12	50	40	75	400	258	173	201	224	0	MOVE	A
N50Z	55D26R	12	60	48	95	500	258	173	201	224	1	MOVE	A
N50ZL	55D26L	12	60	48	95	500	258	173	201	224	0	MOVE	A
NS70	65D26R	12	65	52	110	525	258	173	201	224	1	MOVE	A
NS70L	65D26L	12	65	52	110	525	258	173	201	224	0	MOVE	A
NX110-5	80D26R	12	68	54	125	575	258	173	201	224	1	MOVE	A
NX110-5L	80D26L	12	68	54	125	575	258	173	201	224	0	MOVE	A
N70	65D31R	12	70	56	110	525	303	172	201	224	1	MOVE	A
N70L	65D31L	12	70	56	110	525	303	172	201	224	0	MOVE	A
N70Z	75D31R	12	75	60	125	575	303	172	201	224	1	MOVE	A
N70ZL	75D31L	12	75	60	125	575	303	172	201	224	0	MOVE	A
NX120-7	95D31R	12	80	64	135	600	303	172	201	224	1	MOVE	A
NX120-7L	95D31L	12	80	64	135	600	303	172	201	224	0	MOVE	A
N100	95E41R	12	100	80	180	725	406	174	210	232	1	ROPE	A
N120	115F51	12	120	96	230	850	507	188	195	218	3	ROPE	A
N150	145G51	12	150	120	300	1,000	510	221	196	219	3	ROPE	A
N200	190H52	12	200	160	420	1,100	517	273	215	238	3	ROPE	A

▼ DIN Battery Specification



DIN TYPE	VOLT (V)	CAPACITY 20 HR (Ah)	RESERVE CAPACITY (min.)	CCA SAE (Amp) at -18°C	DIMENSION (mm)				CELL LAYOUT	HANDLE	TERMINAL SHAPE
					LENGTH	WIDTH	HEIGHT	TOTAL HEIGHT			
53646	12	36	55	300	207	175		175	0	MOVE	A
54433	12	44	70	400	207	175		190	0	MOVE	A
54519	12	45	75	425	242	175		175	0	MOVE	A
55530	12	55	95	525	242	175		190	0	MOVE	A
56318	12	63	110	475	278	175		175	0	MOVE	A
56618	12	66	125	600	278	175		190	0	MOVE	A
58024	12	80	140	700	278	175		190	0	MOVE	A
58515	12	85	156	575	353	175		175	0	MOVE	A
58827	12	88	170	750	353	175		190	0	MOVE	A
60038	12	100	190	800	353	175		190	0	MOVE	A
62034	12	120	260	950	513	188	202	223	4	ROPE	A
64020	12	140	300	1,050	513	188	202	223	4	ROPE	A
67018	12	170	380	1,200	513	222	202	223	4	ROPE	A
68024	12	180	400	1,250	513	222	202	223	4	ROPE	A
70027	12	200	420	1,300	518	274	221	242	4	ROPE	A
72025	12	220	450	1,350	518	274	221	242	4	ROPE	A



▼ JIS Battery Packaging



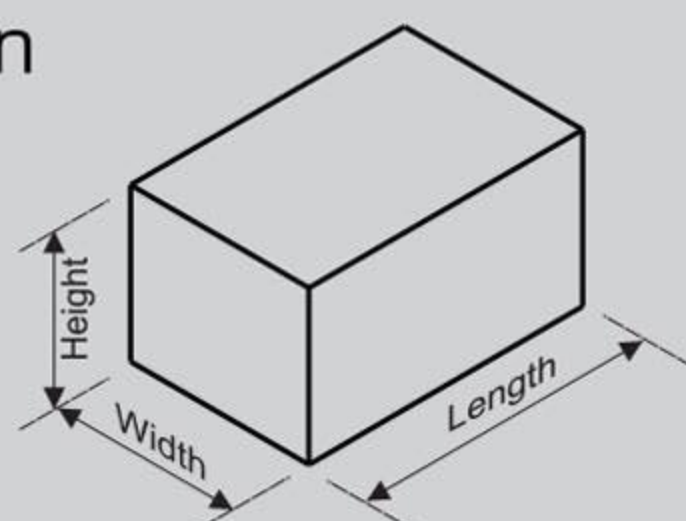
OLD JIS	NEW JIS	BOX DIMENSION (mm)			VOLUME M ³	BATTERY QTY. PER 20FT CONTAINER	PALLET DIMENSION (mm)		
		LENGTH	WIDTH	HEIGHT			LENGTH	WIDTH	HEIGHT
NS40	32B20R	215	141	257	0.007791	2100	1100	1100	140
NS40L	32B20L	215	141	257	0.007791	2100	1100	1100	140
NS40S	32B20RS	215	141	257	0.007791	2100	1100	1100	140
NS40LS	32B20LS	215	141	257	0.007791	2100	1100	1100	140
NS40Z	36B20R	215	141	257	0.007791	2100	1100	1100	140
NS40ZL	36B20L	215	141	257	0.007791	2100	1100	1100	140
NS40ZS	36B20RS	215	141	257	0.007791	2100	1100	1100	140
NS40ZLS	36B20LS	215	141	257	0.007791	2100	1100	1100	140
N40	32C24R	254	140	263	0.009352	1600	1100	1100	140
N40L	32C24L	254	140	263	0.009352	1600	1100	1100	140
NS60	46B24R	254	140	263	0.009352	1600	1100	1100	140
NS60L	46B24L	254	140	263	0.009352	1600	1100	1100	140
NS60S	46B24RS	254	140	263	0.009352	1600	1100	1100	140
NS60LS	46B24LS	254	140	263	0.009352	1600	1100	1100	140
	55D23R	242	183	263	0.011647	1200	1100	1100	140
	55D23L	242	183	263	0.011647	1200	1100	1100	140
N50	48D26R	275	184	257	0.013004	1200	1100	1100	140
N50L	48D26L	275	184	257	0.013004	1200	1100	1100	140
N50Z	55D26R	275	184	257	0.013004	1200	1100	1100	140
N50ZL	55D26L	275	184	257	0.013004	1200	1100	1100	140
NS70	65D26R	275	184	257	0.013004	1200	1100	1100	140
NS70L	65D26L	275	184	257	0.013004	1200	1100	1100	140
NX110-5	80D26R	275	184	257	0.013004	1200	1100	1100	140
NX110-5L	80D26L	275	184	257	0.013004	1200	1100	1100	140
N70	65D31R	321	184	270	0.015947	1050	1100	1100	140
N70L	65D31L	321	184	270	0.015947	1050	1100	1100	140
N70Z	75D31R	321	184	270	0.015947	1050	1100	1100	140
N70ZL	75D31L	321	184	270	0.015947	1050	1100	1100	140
NX120-7	95D31R	321	184	270	0.015947	1050	1100	1100	140
NX120-7L	95D31L	321	184	270	0.015947	1050	1100	1100	140
N100	95E41R	423	186	277	0.021794	700	1100	1100	140
N120	115F51	524	200	257	0.026934	600	1100	1100	140
N150	145G51	527	234	271	0.033419	400	1100	1100	140
N200	190H52	534	285	277	0.042157	400	1100	1100	140

▼ DIN Battery Packaging

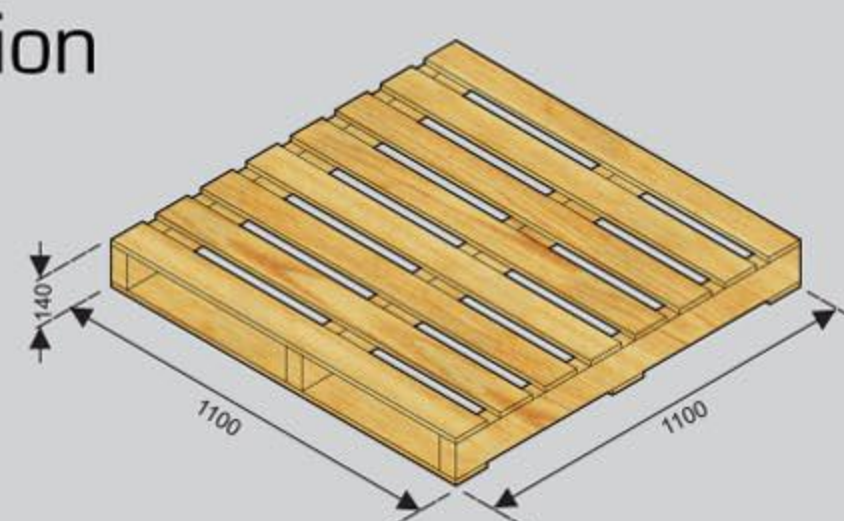


DIN TYPE	BOX DIMENSION (mm)			VOLUME M ³	BATTERY QTY. PER 20FT CONTAINER	PALLET DIMENSION (mm)		
	LENGTH	WIDTH	HEIGHT			LENGTH	WIDTH	HEIGHT
53646	225	187	221	0.009888	1200	1100	1100	140
54433	225	187	235	0.009888	1200	1100	1100	140
54519	258	186	228	0.010941	1200	1100	1100	140
55530	258	187	242	0.011676	1200	1100	1100	140
56318	296	187	208	0.012565	1050	1100	1100	140
56618	296	187	227	0.012565	1050	1100	1100	140
58024	296	187	227	0.012565	1050	1100	1100	140
58515	369	188	221	0.016719	900	1100	1100	140
58827	369	188	241	0.016719	900	1100	1100	140
60038	369	188	241	0.016719	900	1100	1100	140
62034	530	202	257	0.027514	600	1100	1100	140
64020	530	202	257	0.027514	600	1100	1100	140
67018	529	233	258	0.031800	400	1100	1100	140
68024	529	233	258	0.031800	400	1100	1100	140
70027	534	286	257	0.039250	400	1100	1100	140
72025	534	286	257	0.039250	400	1100	1100	140

Box Dimension



Pallet Dimension



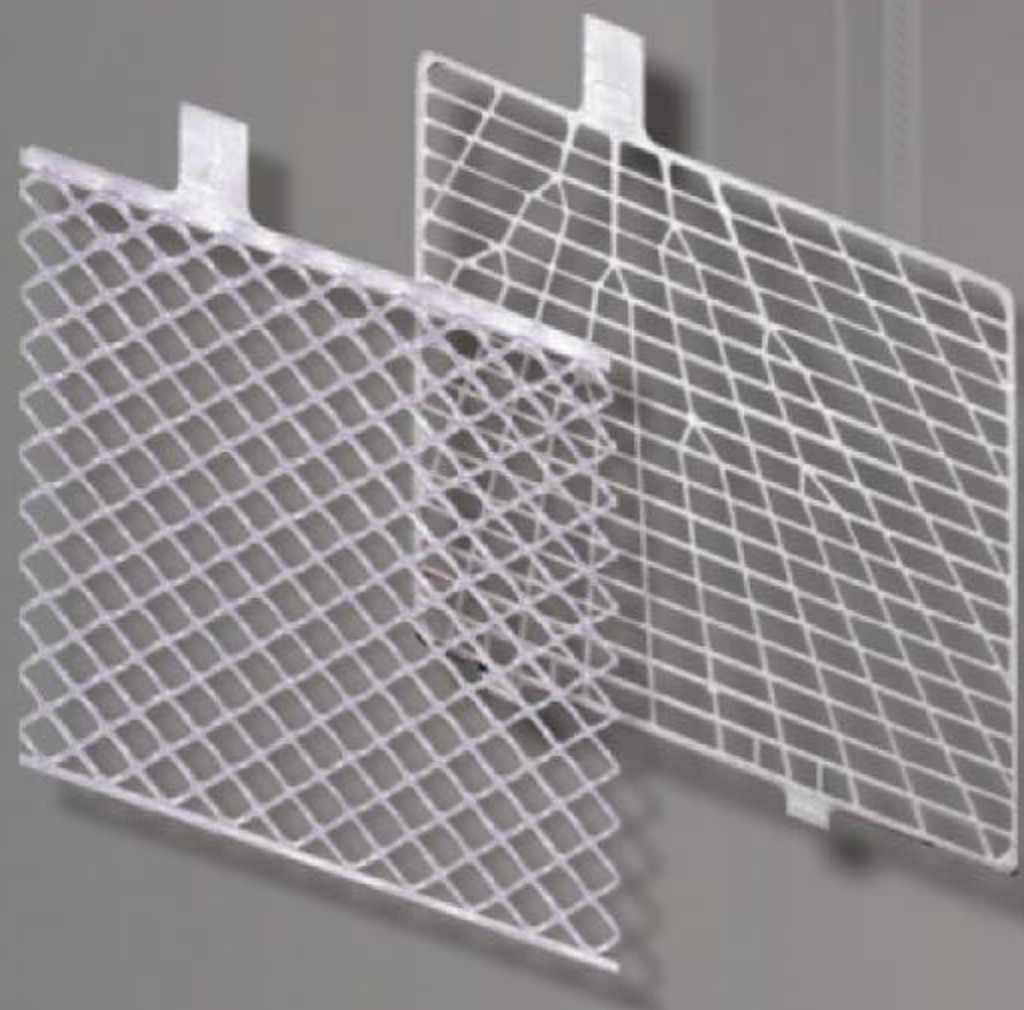
Storage

- Keep batteries upright.
- Do not expose to direct sunlight.
- Keep batteries clean and always store in a cool & dry place.
- First In - First Out (FIFO) storage procedure must be applied.

CONSTRUCTION DETAIL



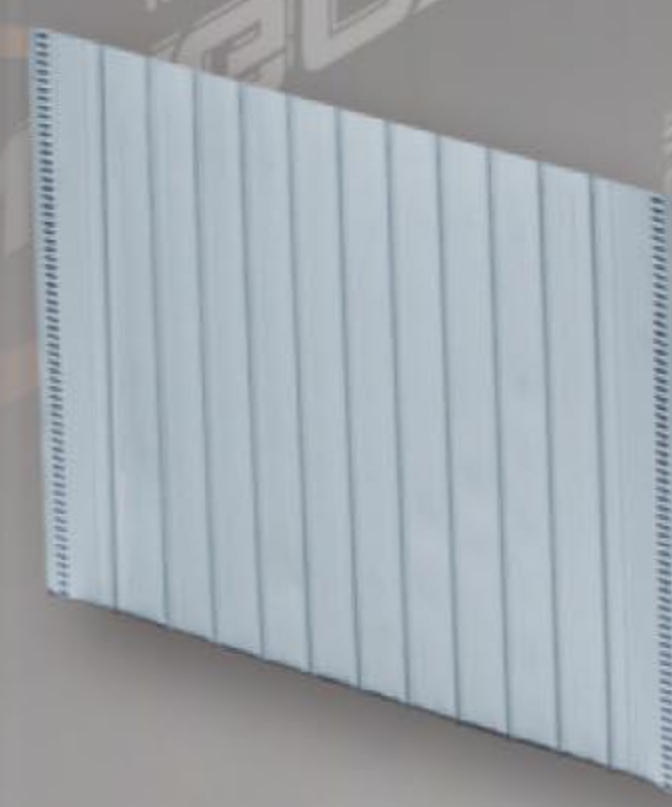
BATTERY ELEMENT CONSTRUCTION



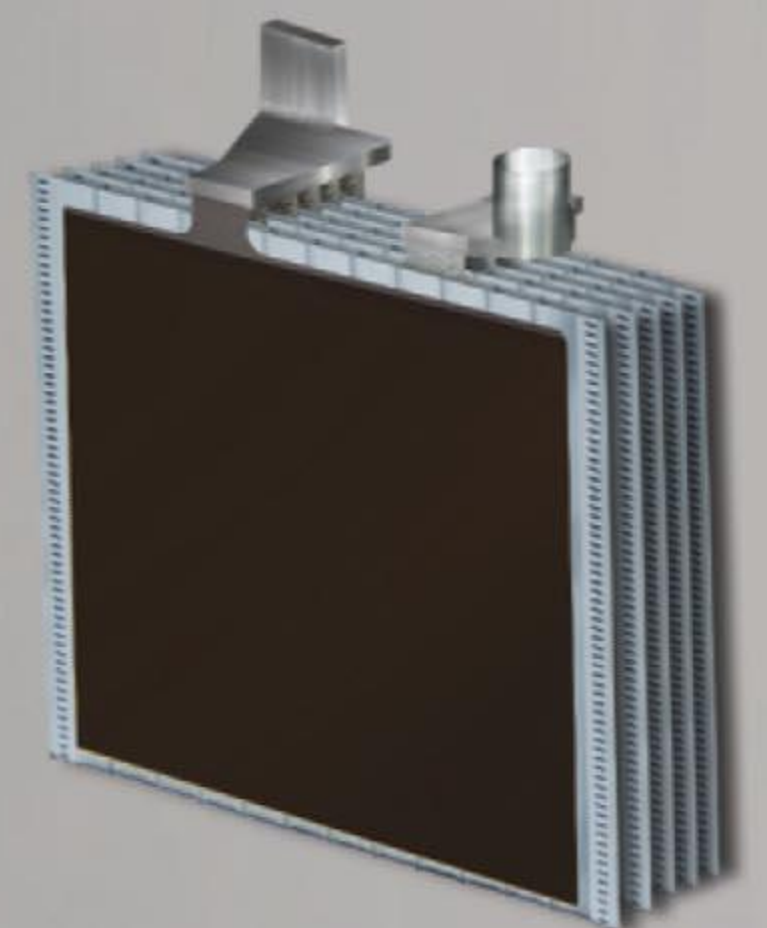
1. Frame grid
 - Ensure High Durability
 Calcium alloy
 - Reduces self discharged



2. Improved method in plate processing
 - Improves life - cycle



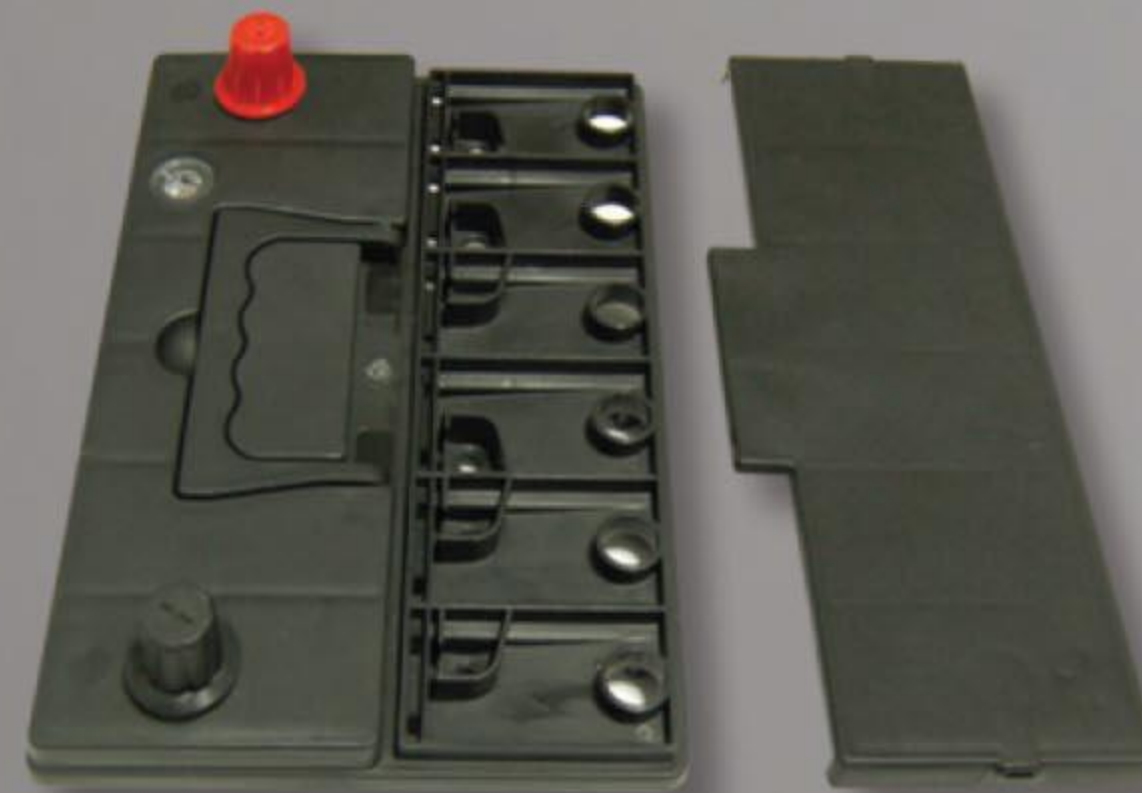
3. Low resistance PE separator
 - High cranking



4. Advanced center lug
 - High cranking performance



5. Magic Eye indicator
 - Easy to check charging state



6. Excellent handle design
 - Handling convenience
 Advanced sealed cover
 - prevents acid leakage
 - minimize gassing



7. Flame arrester
 - prevents external sparks