

BATTERIES



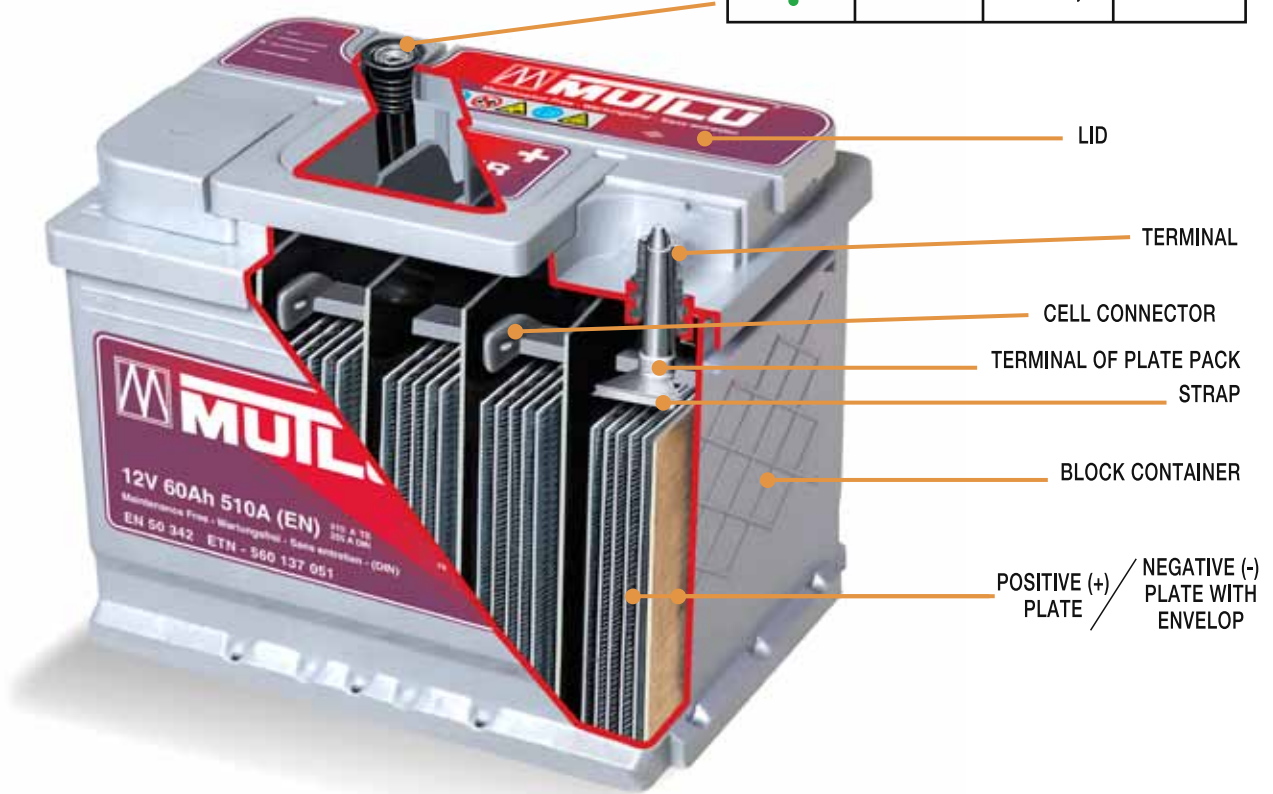
STARTER

**MUTLU**

Akü ve Malzemeleri San. A.Ş.

**CHARGE INDICATOR**

	<b>GREEN</b> 	<b>BLACK</b> 	<b>YELLOW OR WHITE</b> 
	Ready	Charging Necessary	Add Distilled Water


**12 VOLT STARTER BATTERIES**

Type			Capacity at 20 hour rate, +27°C Ah	Cold start performance at -18°C		Layout	Terminal	Holddown	Overall dimensions (mm)				Weight With acid kg.	Explanations	Lid type	
TS EN	ETN	Equal DIN Type		TS EN A	DIN A				Length mm	Width mm	Height Except Terminal mm	Height mm				
*SD-35A	535 020 024	535 20	35	240	150	0	3	B0	196	125	202	222	10.6	13		
*SD-35B	535 022 024	535 22	35	240	150	1	3	B0	196	125	202	222	10.6	13		
*SD-42A	542 103 030		42	300	175	1	1	B0	196	125	202	222	11.2	13		
*SD-42B	542 105 030		42	300	175	1	3	B0	196	125	202	222	11.2	13		
*SD-42C			42	300	175	0	1	B0	196	125	202	222	11.2	13		
*SD-42D			42	300	175	0	3	B0	196	125	202	222	11.2	13		
*SD-45A	545 150 036	545 23	45	360	200	0	1	B0	237	127	201	222	13.0	6.13		
*SD-45B	545 149 036	545 24	45	360	200	1	1	B0	237	127	201	222	13.0	6.13		
*SD-45C		545 84	45	360	200	0	3	B0	237	127	201	222	13.0	6.13		
*SD-45D		545 51	45	360	200	1	3	B0	237	127	201	222	13.0	6.13		
*SD-56A	556 101 042		56	420	230	0	1	B0	237	127	201	222	15.0	6.13		
*SD-56B			56	420	230	1	1	B0	237	127	201	222	15.0	6.13		
LB1-36A	536 046 030	536 46	36	300	175	0	1	B4	205	175	175	175	10.5	1.5.6		
LB1-36B	536 121 030		36	300	175	1	1	B4	205	175	175	175	10.5	1.5.6		
LB1-36C	536 053 030	536 53	36	300	175	0	1	B1	205	175	175	175	10.5	1.5.6		
LS1-40A	540 101 036		40	360	200	0	1	B13	207	175	190	190	12.0	1.5.6		
LS1-40B	540 123 036		40	360	200	1	1	B13	207	175	190	190	12.0	1.5.6		
LBS1-43A	543 024 033	543 24	43	330	210	0	1	B13	207	175	175	175	11.5	1.5.6		
LBS1-43B	543 119 033		43	330	210	1	1	B13	207	175	175	175	11.5	1.5.6		
LBS1-44A	544 117 036	544 65	44	360	210	0	1	B13	207	175	175	175	11.6	1.5.6		
LBS1-44B	544 118 036	544 66	44	360	210	1	1	B13	207	175	175	175	11.6	1.5.6		
LS1-44A	544 069 036	544 69	44	360	210	0	1	B13	207	175	190	190	12.0	1.5.6		
LS1-44B	544 064 036	544 64	44	360	210	1	1	B13	207	175	190	190	12.0	1.5.6		
LS1-50A	550 110 045	550 54	50	450	250	0	1	B13	207	175	190	190	12.6	1.5.6		
LS1-50B	550 136 045		50	450	250	1	1	B13	207	175	190	190	12.6	1.5.6		
*LBS1-43C	543 017 033	543 17	43	330	210	0	19	B13	207	175	175	175	11.5	1.5.6		
*LS0-40A	540 113 033	540 08	40	330	200	0	1	B13	175	175	190	190	10.5	1.6.14		
*LS1-50C	550 138 051		50	510	300	0	1	B13	207	175	190	190	13.6	1.6.14		
*LS1-50D			50	450	255	0	1	B13	207	175	190	190	13.5	1.6.14		
*LS1-50F	550 137 042	550 54	50	420	250	0	1	B13	207	175	190	190	12.7	1.6.14		
*LS2-60A	560 139 054	561 11	60	540	320	0	1	B13	242	175	190	190	15.8	1.6.14		

## 12 VOLT STARTER BATTERIES

Type			Capacity at 20 hour rate, +27°C Ah	Cold start performance at -18°C		Layout	Terminal	Holddown	Overall dimensions (mm)				Weight With acid kg.	Explanations	Lid type
TS EN	ETN	Equal DIN Type		TS EN A	DIN A				Length mm	Width mm	Height Except Terminal mm	Height mm			
* LBS1-47A	547 101 042		47	420	250	0	1	B13	207	175	175	175	12.0	1.2.5.6	
* LBS2-50A			50	600	310	0	1	B13	242	175	175	175	15.0	1.2.5.6	
* LBS2-55A	555 154 051		55	510	255	0	1	B13	242	175	175	175	14.2	1.2.5.6	
* LBS3-65A	565 118 072		65	720	420	0	1	B13	278	175	175	175	17.8	1.2.5.6	
* LS1-50E	550 153 042		50	420	250	0	1	B13	207	175	190	190	13.0	1.2.5.6	
* LS2-60B	560 169 060		60	600	310	0	1	B13	242	175	190	190	16.0	1.2.5.6	
* LS3-70A	570 143 072		70	720	420	0	1	B13	278	175	190	190	18.2	1.2.5.6	
* LBS2-55C		555 66	55	420	255	0	1	B13	242	175	175	175	13.6	1.2.6.15	
* LS2-60C	560 137 051		60	510	255	0	1	B13	242	175	190	190	15.0	1.2.6.15	
* LS3-66C	566 124 051	566 38	66	510	300	0	1	B13	278	175	190	190	17.0	1.2.6.15	
* LS3-72A	572 111 064	572 30	72	640	380	0	1	B13	278	175	190	190	17.7	1.2.6.15	
* LS3-72G	572 112 072		72	720	420	0	1	B13	278	175	190	190	18,40	1.2.6.15	
* LS5-100C	600 111 085	600 44	100	850	500	0	1	B13	353	175	190	190	23.5	1.2.6.15	
* LBS2-50B			50	500	300	0	1	B1	242	175	175	175	16.0	1.5	
* LS2-60D	560 136 054		60	540	300	0	1	B13	242	175	190	190	16.0	1.5	
* LS3-65A			65	600	310	0	1	B13	277	175	190	190	17.8	1.5	
LS2-60G			60	480	300	0	1	B13	242	175	190	190	16.1	1.2.5.6.11	
LBS2-45A	545 133 036	545 19	45	360	220	0	1	B13	242	175	175	175	13.0	1.2.6	
LBS2-45B	545 134 036		45	360	220	1	1	B13	242	175	175	175	13.0	1.2.6	
LBS2-50B	550 134 042	550 40,550 56	50	420	210	0	1	B13	242	175	175	175	13.4	1.2.6	
LBS2-50C	550 135 042		50	420	210	1	1	B13	242	175	175	175	13.4	1.2.6	
LS2-50A			50	420	210	0	1	B13	242	175	190	190	13.5	1.2.6	
LS2-50B			50	420	210	1	1	B13	242	175	190	190	13.5	1.2.6	
LBS2-55B		555 66	55	420	255	0	1	B13	242	175	175	175	13.6	1.2.6	
LS2-55A	555 125 045	555 59	55	450	255	0	1	B13	242	175	190	190	14.4	1.2.6	
LS2-55B	555 126 045	555 65	55	450	255	1	1	B13	242	175	190	190	14.4	1.2.6	
LS2-60F	560 137 051		60	510	255	0	1	B13	242	175	190	190	15.0	1.2.6	
LS2-60J	560 138 051		60	510	255	1	1	B13	242	175	190	190	15.0	1.2.6	
LS2-62A	562 114 051	562 19	62	510	280	0	1	B13	242	175	190	190	15.6	1.2.6	
LS2-62B	562 115 051	562 21	62	510	280	1	1	B13	242	175	190	190	15.6	1.2.6	
LS2-63A	563 107 054		63	540	300	0	1	B13	242	175	190	190	15.7	1.2.6	
LS2-63B	563 108 054		63	540	300	1	1	B13	242	175	190	190	15.7	1.2.6	
LS2-65A			65	540	330	1	1	B13	242	175	190	190	15.8	1.2.6	
* LS3-72B	572 104 064	572 30	72	640	380	0	1	B13	306	175	190	190	17.7	1.3.5.6	
* LS5-88A	588 113 064	588 21	88	640	395	0	1	B13	381	175	190	190	22.0	1.3.5.6	
LBS3-60A	560 147 060	560 97	60	600	310	0	1	B13	278	175	175	175	16.8	1.2.5.6	
* LBS3-60B			60	590	310	0	1	B13	278	175	175	175	16.8	1.2.5	
LBS3-66A	566 116 054	566 49	66	540	300	0	1	B13	278	175	175	175	16.8	1.2.5.6	
LS3-66A	566 124 051	566 38	66	510	300	0	1	B13	278	175	190	190	17.0	1.2.5.6	
LS3-66B	566 123 051	566 05	66	510	300	1	1	B13	278	175	190	190	17.0	1.2.5.6	
LS3-70B	570 135 064		70	640	380	0	1	B13	278	175	190	190	17.7	1.2.5.6	
LBS4-70A	570 127 068		70	680	400	0	1	B13	315	175	175	175	19.7	1.2.5.6	
L3-72A	572 107 057		72	570	270	0	1	B1	275	175	190	190	21.0	1.2.5.6.11	
LS3-72C	572 111 064	572 30	72	640	380	0	1	B13	278	175	190	190	17.7	1.2.5.6	
LS3-72D	572 111 064	572 30	72	640	380	0	1	B1	278	175	190	190	17.7	1.2.5.6	
LS3-72E	572 112 072	572 20	72	720	420	0	1	B13	278	175	190	190	18.4	1.2.5.6	
LS3-72F	572 113 072	572 19	72	720	420	1	1	B13	278	175	190	190	18.4	1.2.5.6	
LS3-75A	575 111 064		75	640	380	0	1	B13	278	175	190	190	18.2	1.2.5.6	
LS3-75B	575 110 064		75	640	380	1	1	B13	278	175	190	190	18.2	1.2.5.6	
LBS4-80A	580 115 064	580 14	80	640	420	0	1	B13	315	175	175	175	18.8	1.2.5.6	
* LBS4-80B			80	700	400	0	1	B13	315	175	175	175	20.2	1.2.5	
* LS4-84A			84	800	450	0	1	B13	315	175	190	190	22.0	1.2.5	
LS5-88B	588 118 064	588 27	88	640	395	0	1	B13	353	175	190	190	22.0	1.2.5.6	
LS5-88C	588 119 064	588 21	88	640	395	1	1	B13	353	175	190	190	22.0	1.2.5.6	
LS5-90A	590 114 064	588 33	90	640	395	0	1	B13	353	175	190	190	22.1	1.2.5.6	
LS5-90B	590 113 064		90	640	395	1	1	B13	353	175	190	190	22.1	1.2.5.6	
LS5-92A	592 111 076	592 18	92	760	450	0	1	B13	353	175	190	190	22.8	1.2.5.6	
LS5-92B	592 110 076		92	760	450	1	1	B13	353	175	190	190	22.8	1.2.5.6	
LS5-100A	600 111 085	600 44	100	850	500	0	1	B13	353	175	190	190	23.5	1.2.5.6	
LS5-100B	600 113 085		100	850	500	1	1	B13	353	175	190	190	23.5	1.2.5.6	

## 12 VOLT STARTER BATTERIES

Type			Capacity at 20 hour rate, +27°C Ah	Cold start performance at -18°C		Layout	Terminal	Holddown	Overall dimensions (mm)				Weight With acid kg.	Explanations	Lid type
TS EN	ETN	Equal DIN Type		TS EN A	DIN A				Length mm	Width mm	Height Except Terminal mm	Height mm			
*LTS1-45A			45	410	220	0	1	B13	207	175	168	190	11.6	13	
*LTS1-55A			55	500	255	0	1	B13	207	175	168	190	12.8	13	
*LTS1-55B			55	500	255	1	1	B13	207	175	168	190	12.8	13	
*SD-65B			65	510	300	0	1	B1	262	175	205	226	18.45	13	
*SD-68A			68	600	310	0	1	B1	262	175	205	226	18.8	13	
*SD-68B			68	540	315	0	1	B1	262	175	205	226	18.8	13	
*SD-60A	560 150 036		60	360	170	0	1	B1	262	175	205	226	17.3	13	
*SD-60B	560 151 036		60	360	170	1	1	B1	262	175	205	226	17.3	13	
*SD-70A	570 029 054	570 29	70	540	315	0	1	B1	262	175	205	226	19.0	13	
*SD-70B	570 024 054	570 24	70	540	315	1	1	B1	262	175	205	226	19.0	13	
*SD-75A	575 109 057	575 29	75	570	315	0	1	B1	262	175	205	226	19.6	13	
*SD-75B	575 102 057	575 24	75	570	315	1	1	B1	262	175	205	226	19.6	13	
*SD-80A	580 116 048		80	480	280	0	1	B1	262	175	205	226	20.2	13	
*SD-80B	580 117 048		80	480	280	1	1	B1	262	175	205	226	20.2	13	
ET3-60A	560 113 045		60	450	255	0	1	B1	260	135	203	224	15.2	6.13	
*SD-80C	580 104 048	580 26	80	480	280	0	1	B3	323	176	207	232	20.2	3.6.9	
SD-90A	590 102 068	590 43	90	680	340	0	1	B3	323	176	207	232	23.3	3.6.9	
SD-90B	590 106 068		90	680	340	1	1	B3	323	176	207	232	23.3	3.6.9	
SD-100A	600 119 076		100	760	395	0	1	B3	323	176	207	232	24.6	3.6.9	
SD-100B	600 120 076		100	760	395	1	1	B3	323	176	207	232	24.6	3.6.9	
SD-105A	605 103 076	605 28	105	760	395	0	1	B3	347	177	207	232	26.0	3.6.9	
SD-105B	605 106 076	605 27	105	760	395	1	1	B3	347	177	207	232	26.0	3.6.9	
SD-105C	605 102 072	605 28	105	720	360	0	1	B3	347	177	207	232	26.2	3.6.7.9	
SD-110A	610 108 076	610 47	110	760	420	0	1	B3	347	177	207	232	26.5	3.6.9	
*D7-100A	600 011 072	600 30	100	720		2	1	B0	286	269	208	230	30.5	3.4	
*D7-125A	625 023 000	625 23	125	800		2	1	B0	286	269	208	230	36.5	3.4	
*D2-115A			115	800	440	0	1	B0	344	173	212	237	27.2	2	
*D3-128A	628 101 072	625 11,625 12	128	720	410	0	1	B0	344	173	262	290	36.2	2.7	
D4a-120A	620 111 080	620 40	120	800	420	3	1	B3	513	186	195	223	35.0	3.6.7.9	
D4-120B		620 34	120	800	420	3	1	B0	513	186	195	223	35.0	3.6.7.9	
D4a-135A	635 104 085	640 36	135	850	450	3	1	B3	513	186	195	223	36.7	3.6.7.9	
D4-135B			135	850	450	3	1	B0	513	186	195	223	36.7	3.6.7.9	
D5a-150A	650 105 090	640 36	150	900	500	3	1	B3	513	223	195	223	42.8	3.6.7.9	
D5-150B		643 17,655 13	150	900	500	3	1	B0	513	223	195	223	42.8	3.6.7.9	
D5a-165A	665 106 100	665 15	165	1000	540	3	1	B3	513	223	195	223	44.5	3.6.7.9	
D5-165B	665 105 090	665 14	165	900	540	3	1	B0	513	223	195	223	44.5	3.6.7.9	
D5a-180A	680 101 110	680 19	180	1100	600	3	1	B3	513	223	195	223	48.5	3.6.7.9	
D5-180B		680 22	180	1100	600	3	1	B0	513	223	195	223	48.5	3.6.7.9	
D5a-190A	690 103 115		190	1150	630	3	1	B3	513	223	195	223	48.7	3.6.7.9	
D5-190B			190	1150	630	3	1	B0	513	223	195	223	48.7	3.6.7.9	
D5-190C	690 104 110	680 22	190	1100	630	3	1	B0	513	223	195	223	49.0	3.6.8.9	
D6-190A	690 101 110		190	1100	600	3	1	B0	518	273	215	242	57.0	3.6.7.9	
D6-200A	700 103 115		200	1150	630	3	1	B0	518	273	215	242	57.5	3.6.7.9	
D6-200B	700 027 105	700 27	200	1050	630	3	1	B0	518	273	215	242	58.8	3.6.8.9.12	
D6-210A	710 101 120	710 14	210	1200	700	3	1	B0	518	273	215	242	58.0	3.6.7.9	
D6-220A	720 105 130		220	1300	600	3	1	B0	518	273	215	242	61.5	3.6.7.9	
D6-220B	720 102 115	720 18	220	1150	600	3	1	B0	518	273	215	242	61.6	3.6.8.9	
D6-225A	725 101 115	725 11	225	1150	600	3	1	B0	518	273	216	242	61.6	3.6.8.9.12	
D6-225B	725 101 140	725 12	225	1400	720	3	1	B0	518	273	216	242	63.0	3.6.7.9	
D6-240A	740 101 145		240	1450	750	3	1	B0	518	273	216	242	64.0	3.6.7.9	

## 12 VOLT MARIN BATTERIES

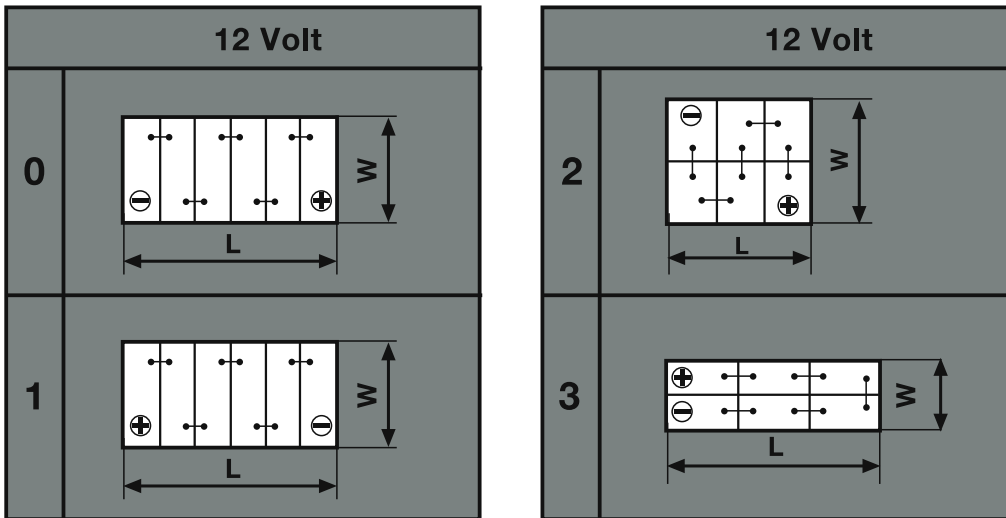
Type			Capacity at 20 hour rate, +27°C Ah	Cold start performance at -18°C		Layout	Terminal	Holddown	Overall dimensions (mm)				Weight With acid kg.	Explanations	Lid type
TS EN	ETN	Equal DIN Type		TS EN A	DIN A				Length mm	Width mm	Height Except Terminal mm	Height mm			
LS2-60M	560 135 045		60	450	255	0	1	B13	242	175	190	190	15.2	1.2.5.6.9.10	
LS5-90M	590 115 060		90	600	340	0	1	B13	353	175	190	190	22.2	1.2.5.6.9.10	
*D3-125M	625 012 072	625 12	125	720	410	0	1	B0	349	175	263	290	36.6	2.9.10	
D4a-135M	635 046 076	640 36	135	760	420	3	1	B3	513	186	195	223	36.7	3.6.9.10	
D5a-180M	680 019 100	680 19	180	1000	560	3	1	B3	513	223	195	223	48.5	3.6.9.10	
D6-200M	700 102 100	700 27	200	1000	600	3	1	B0	518	291	215	242	62.2	3.6.9.10	

### EXPLANATIONS

- 1- Block Lid (Post height within lid height)
  - 2- Integrated Handle to Cover
  - 3- Lateral Handle (from container)
  - 4- NATO VG 95282
  - 5- Kamina
  - 6- With Charge Indicator
  - 7- Heavy Duty Batteries
  - 8- Super Heavy Duty Batteries
  - 9- Additional Vibration Resistance
  - 10- With High Cycle Capacity
  - 11- Taxi Battery
  - 12- Bus Battery
  - 13- Special Battery for Japanese Cars
  - 14- Sextuple plug
  - 15- Sealed Battery
- \*Supplied on request

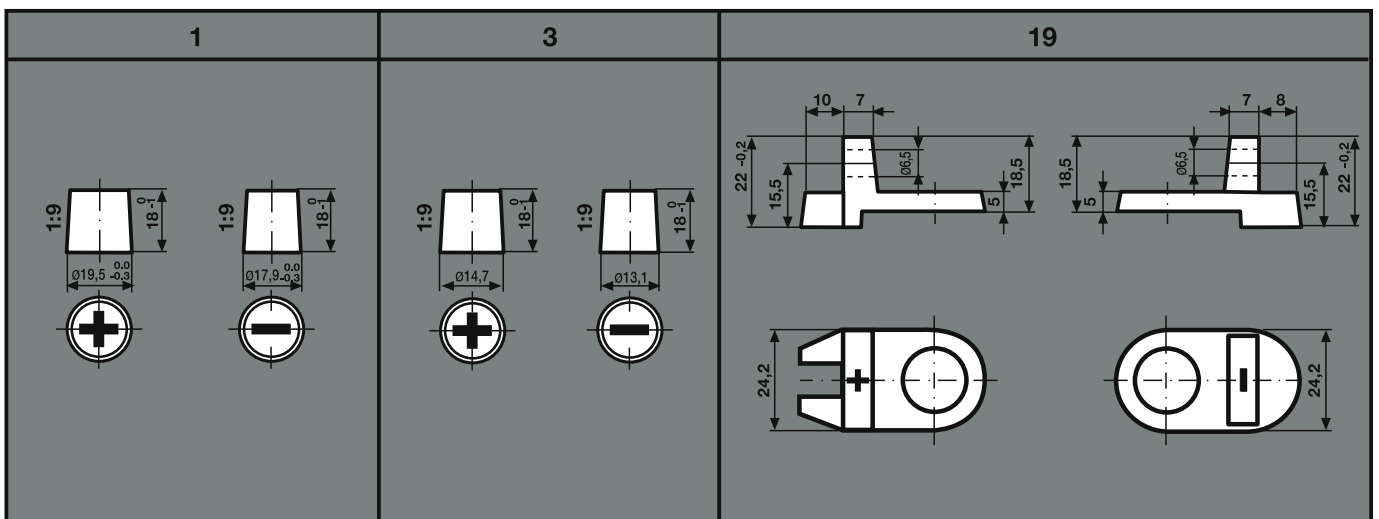


### KEY TO BATTERY LAYOUTS

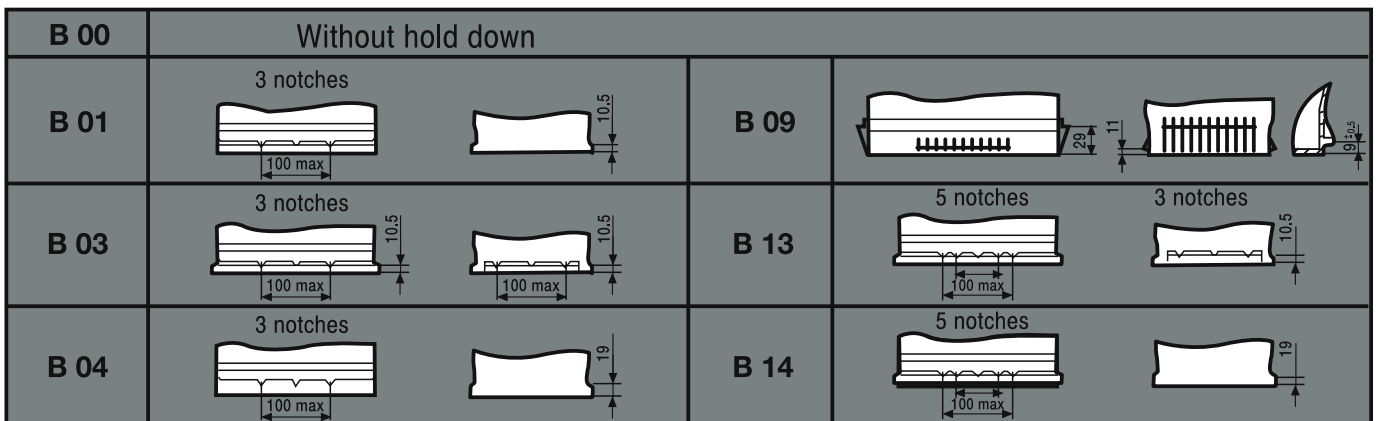


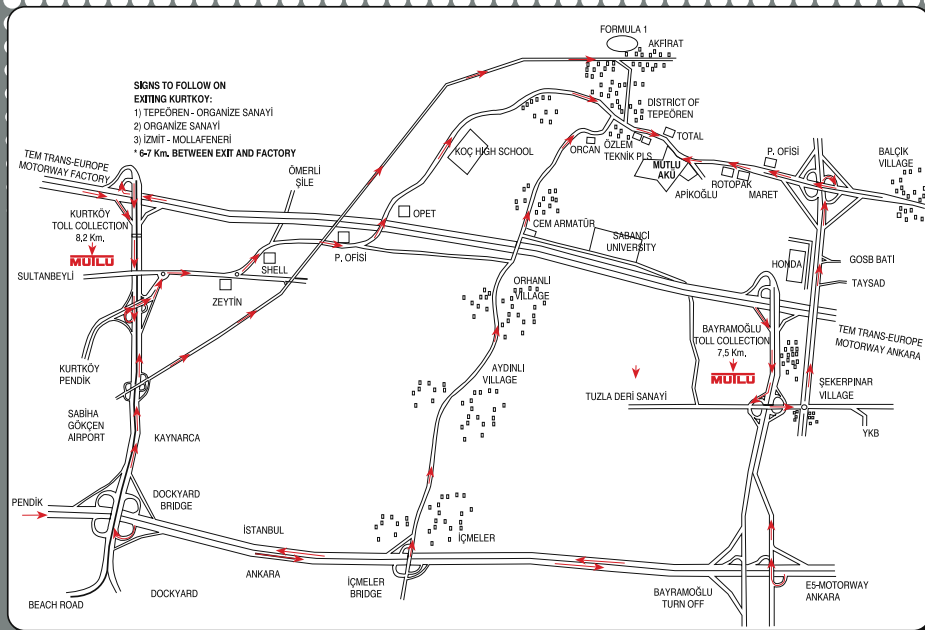
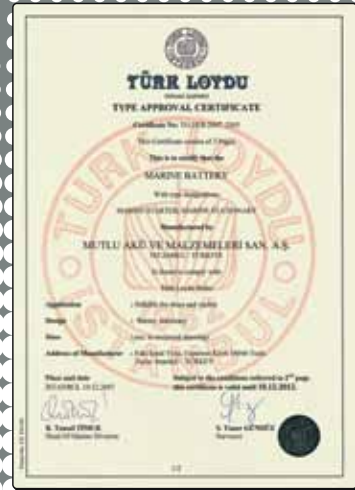
L= Length  
W= Width

### KEY TO BATTERY TERMINALS



### BATTERY HOLD DOWNS





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