AUTOMOTIVE

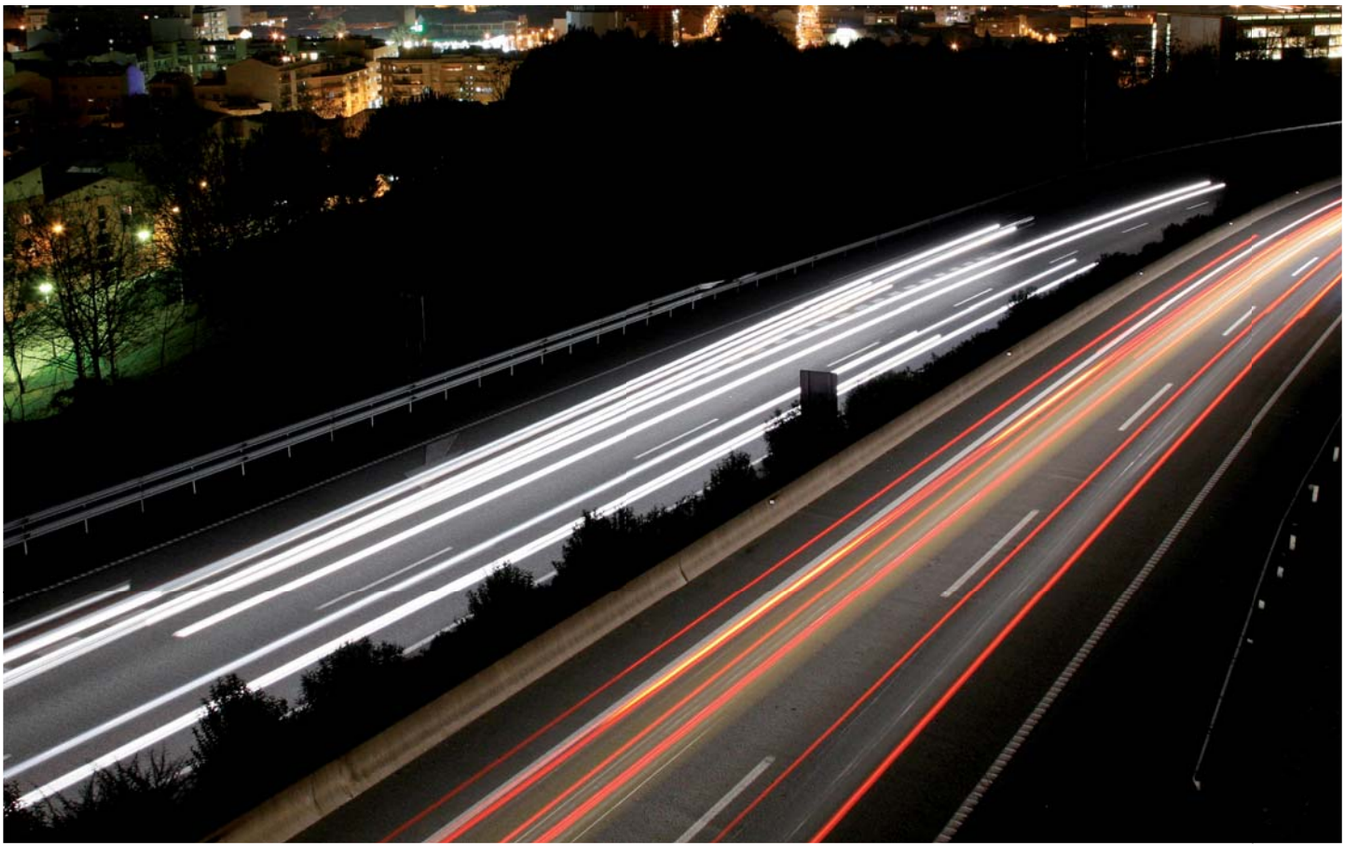
Starter batteries

Car and off highway vehicles

Ref. 77957500

Reference	AH	LYT	EN	L	W	H	HD
77953500	35	0	300	197	128	225	S/T
77953501	35	1	300	197	128	225	S/T
77954600	45	0	300	220	135	225	B13
77954601	45	1	300	220	135	225	B13
77954700	47	0	350	210	175	175	B13
77954701	47	1	350	210	175	175	B13
77956000	60	0	460	242	175	175	B13
77956001	60	1	460	242	175	175	B13
77957500	75	0	620	276	175	175	B13
77957501	75	1	620	276	175	175	B13
77958400	80	0	540	272	175	225	B09
77958401	80	1	540	272	175	225	B09
77959000	85	0	720	315	175	175	B13
77959500	95	0	720	353	175	175	B13
77959501	95	1	720	353	175	175	B13
77959400	95	0	640	302	172	215	B13
77959401	95	1	640	302	172	215	B13
77961500	100	0	680	353	175	190	B13
*77961000	110	0	680	345	175	232	B13

*Also used on off highway vehicles and farming equipment.



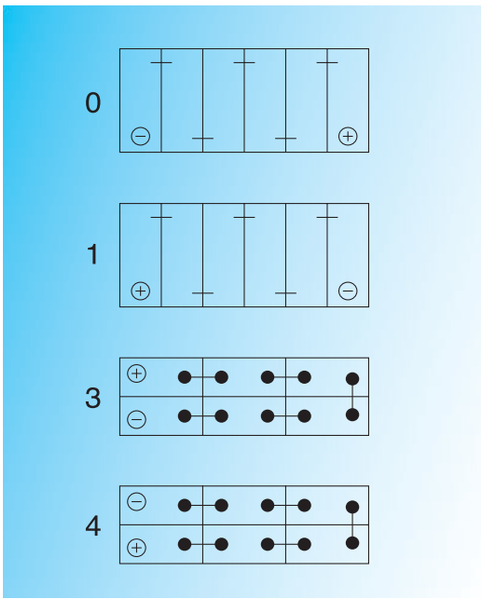
Industrial vehicle and farming equipment

Reference	AH	LYT	EN	L	W	H	HD
77966000	145	0	720	349	175	290	S/T
77965503	155	3	800	513	189	218	B03
77965504	155	4	800	513	189	218	B03
77969003	190	3	950	513	223	218	S/T
77969004	190	4	950	513	223	218	S/T
77972003	220	3	1050	516	272	235	S/T
77972004	220	4	1050	516	272	235	S/T

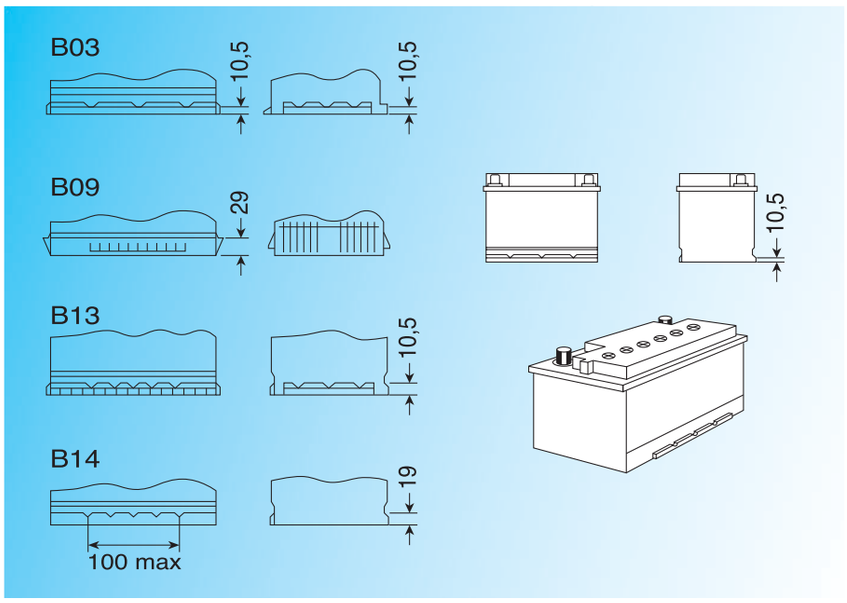
Technical specifications might change according to manufacturer modifications.
For further enquiries thanks for contacting us.

Ref. 77972003

Layout (LYT)



Hold down (HD)



Batteries specifications

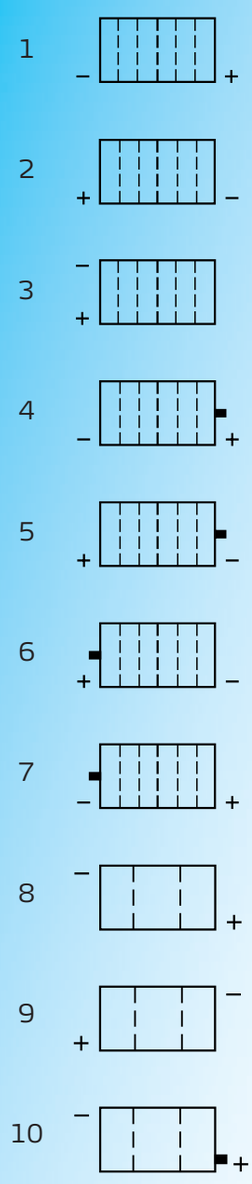
Maintenance free batteries. Feeble electrolyte consumption.

SDR battery range has been designed to cover most of applications: cars or special vehicles (trucks, vans, construction machinery,...).

Motorcycle

Ref: FTX7L-BS

LAYOUT

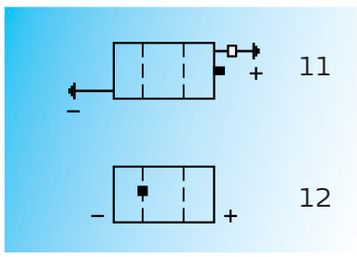


Reference	Type	Lyt.	Ah (10h)	CCA -18ºC	L	W	H	Terminal
AGM battery. Wet charged version with acid.								
77900287	TR4A-12B	3	2,3	30	113	48	85	14
77901287	T7-12B	2	6,5	75	150	65	93	M12
77902288	T19-12B	1	19* 20hr	200	181	76	167	M11
AGM battery. Dry charged with specific acid apart.								
77905287	TX4L-BS	1	3,6	40	113	70	85	M04
77906287	TX5L-BS	1	5	50	113	70	105	M04
77907320	TZ7S-BS	1	6	70	113	70	105	M05
77908287	TX7L-BS	1	6,5	75	113	70	130	M04
77909287	TX7A-BS	2	6,5	75	150	87	93	M04
77900320	T9-BS	2	8	110	150	70	105	M12
77901288	TZ10S-BS	2	8,6	120	150	87	93	M12
77902287	TX9-BS	2	9	120	150	87	105	M05
77903320	T12A-BS	2	9,5	175	150	87	105	M12
77904320	T12B-BS	2	11	150	150	70	130	M12
77905288	TZ12S-BS	2	11	150	150	87	110	M12
77906287	TX12-BS	2	12	150	150	87	130	M04
77907287	TX14-BS	2	12	170	150	87	145	M04
77908288	BTX20L-BS	1	18	200	175	87	155	M04
Dry charged battery 12V. Flooded acid.								
77902843	B4L-B	4	4	40	120	70	92	M04
77903235	B4L-B (con ácido)	4	4	40	120	70	92	M04
77902844	12N5-3B	4	5	45	120	60	30	M06
77903205	B7L-B2	4	8	80	135	75	133	M04
77902848	B7-A	6	8	80	135	75	133	M06
77902850	12N9-4B-1	5	9	90	135	75	139	M06
77902851	12N9-3B	4	9	90	135	75	139	M06
77902852	B9L-A2	7	9	90	135	75	139	M02
77902853	12N10-3A	7	10	100	135	90	45	M06
77902854	12N10-3B	4	10	100	135	90	145	M06
77902855	B12A-A	6	12	130	134	80	160	M06
77902856	B12AL-A	7	12	130	134	80	160	M06
77902857	B12A-B	5	12	130	134	80	160	M06
77902859	B14L-A2	7	14	150	134	89	166	M08
77902858	B14-A2	6	14	150	134	89	166	M08
77902860	B14L-B2	4	14	150	136	91	168	M08
77902863	B16B-A	6	16	200	160	90	161	M04
77902861	B16AL-A2	7	16	180	205	70	162	M02
77902864	51814	4	19* 20hr	160	186	82	173	M11
77902862	B16-B	5	11	200	175	100	155	M06
77902870	B16CL-B	4	11	200	175	100	175	M05
77902865	50-N18L-A	7	20	200	205	90	162	M07
77903250	60-N24AL-B	4	24* 20hr	220	186	126	170	M11
77902868	53030	1	30* 20hr	300	186	130	171	M11
77902869	53211	1	32* 20hr	240	233	131	167	

Motorcycle

Reference	Type	Lyt.	Ah (10h)	CCA -18ºC	L	W	H	Terminal
			Dry charged battery. Flooded acid.					
77902836	6N4-2A-4	11	4	15	70	70	95	
77902837	6N6-3B	12	6	25	98	56	110	M06
77902838	B39-6	8	7	30	127	50	123	M06
77903239	B49-6	9	8	40	90	82	166	M06
77902840	6N11A-1B	10	11	50	120	60	130	M06
77902841	B38-6A	8	13	60	135	82	160	M06

LAYOUT



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TERMINAL

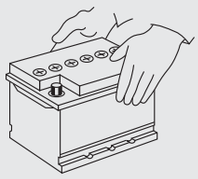
Type	Frontal	Lateral	Upper.	Battery type
M02				FB9L-A2 FB16AL-A2
M04				FTX4L-BS FB4L-B FTX16-BS FTX5L-BS FB16B-A FTX20CH-BS FTX7L-BS FTX12-BS FTX7A-BS FTX14-BS FBTX20L-BS FB7L-B2
M05				FTX9-BS FB16CL-B FTZ7S-BS
M06				12N5-3B FB12AL-A B39-6 FB7-A FB12A-B B49-6 12N9-3B FB16-B 6N11A-1B 12N10-3A B38-6A FB9-B FB12A-A 6N6-3B FB10L-B
M07				F50-N18L-A
M08				FB14L-A2 FB14-A2 FB14L-B2
M11				FT19-12B 51814 53030 F60-N24AL-B
M12				FT7-BS FTZ12S-BS FT9-BS FTZ14S-BS FT12A-BS FT12B-BS FTZ10S-BS
14				FTR4A-BS

Batteries specifications

SDR battery range has been designed to cover most of applications: cars or special vehicles (trucks, vans, construction machinery,...).

Diagnosis of battery

A Visual Control



A.1

Does the battery show signs of exterior acid leakage?

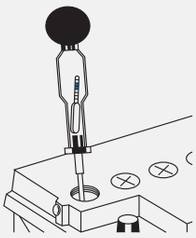
- **NO** → Diagnosis in **B**
- **YES** → Continue to **A.2**

A.2

Are there signs of any knocks, damage or pressure in the area of the leak?

- **NO** → Follow-up claim*
- **YES** → **NO** follow-up claim. No fault can be attributed to the battery

B Control of Density



To gauge the state of the battery with access to the electrolyte, the first thing to do is to check the electrolyte density in all the elements, for which a densimeter will be used.

State of the charge	Density of the acid
Charged	1,25 - 1,28
Semi-charged	1,20 - 1,24
Under-charged	1,12 - 1,19
Extremely discharged	less than 1,12

B.1

Is the density in one or more of the vessels very low with respect to the others?

Example:

1,26	1,26	1,15	1,26	1,26	1,26

- **YES** → Follow-up claim*
- **NO** → Continue to **B.2**

B.2

Is the electrolyte a dark brown colour, does it have particles of paste suspended in it and does it consume a large amount of water?

(These circumstances may occur together or separately).

- **YES** → **NO** follow-up claim. It is overcharged. This is not attributable to the battery. Revise the vehicle's regulator.
- **NO** → Continue to **B.3** o **B.4**

B.3

If the density is uniform in all vessels, but less than 1,25 the battery MUST BE RECHARGED. In very low densities, the electrolyte may have a milky quality (sulphation of the positive plates).

- **Recharge intensity:** This should be a maximum of 10% of its nominal capacity. (E.g.: For a 44AH battery,a maximum of 4,4 amperes should be used for the recharge.) Has the recharge succeded in increasing the electrolyte density to a minimum of 1,25?
- **Observation:** A battery is understood to have accepted the full charge that it is capable of admitting when the density remains constant in all vessels on 3 consecutive measurements, with intervals of one hour. If the temperature of a battery in the process of charge reaches 40º, the recharge is complete.

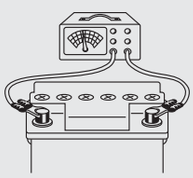
- **YES** → Fully charge the battery and then inspect using control C.
- **NO** → **NO** follow-up claim. The battery is extremely sulphated. Revise the electrical parts of the vehicle (regulator, alternator, positioning of belt).

B.4

Is the density in all vessels uniform and at least 1,25?

- **YES** → Inspect, using control C
- **NO** → Recharge

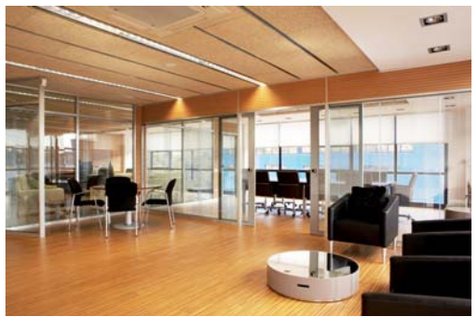
C Control of discharge at a constant intensity

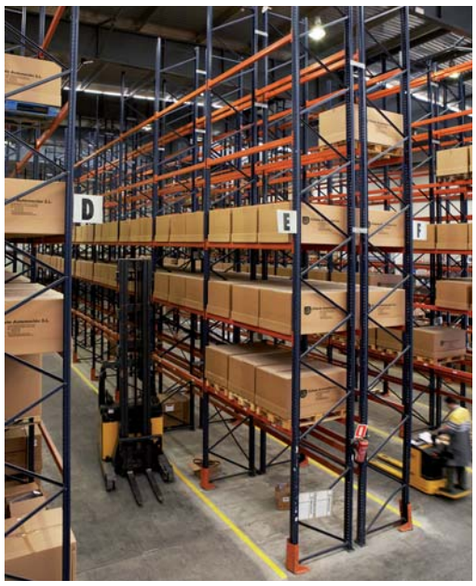


Using a measuring apparatus, subject the battery to its corresponding discharge for 10 seconds. The needle on the meter should indicate the correct charge range. Does the meter descend considerably to the charge range of its discharge?

- **YES** → Follow-up claim*
- **NO** → **NO** follow-up claim

* Given that the battery is within the period of guarantee.





S.D.R. AUTOMOTIVE, S.L. is a company working in the distribution of starter batteries for use on motorcycles, cars, heavy duty, off highway and farming equipment.

In order to strengthen our presence in the European market our company assures the brand SDR complies the highest quality standards. The objective is covering perfectly the needs of our customers.

Our aim is reaching the satisfaction of our customers. With this target we adapt ourselves to the different needs of our customers. We have a skilled team of technicians and expert people always willing to give solution to the different demands we receive. Our facilities allow us having the necessary stocks for assuring a quick supply to our customers.

Our head quarters located in Montcada i Reixac (Barcelona), has increased its warehouse capacity in order to reduce the delays in supplying to our customers.

SDR AUTOMOTIVE SL

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