

CSB DRY CELL BATTERIES

The CSB batteries are composed of dry cells, connected together in series-parallel, to obtain required voltage and capacity.

The cell pack is wrapped in insulating material and then in tin plate or pvc container, giving an easy to handle product.

The capacity/weight and capacity/bulk ratio is certainly superior to any other type of battery. Furthermore, having no need for aeration, they can be installed in watertight boxes (CSC or CSM) that grant functioning during any kind of weather condition.

SUITABILITY

The CSB batteries and respective boxes find their best use in all types of temporary installations where a brief life does not justify the use of solar panels or a long-distance line, or on small buoys and floats that cannot sustain correctly a solar panel due to their reduced dimensions.

Thanks to the many types of COSEMA batteries, it is always possible to identify the one which, based on lantern consumption, gives the ideal autonomy for the type of surveillance required.

The CSB batteries are not re-chargeable, therefore, after use they have to be replaced with new ones.

It is advisable not to throw them into the sea but to hand them over to any collection centre.

BATTERY BOXES

The CSC and CSM boxes are made in hot galvanized steel of a thickness that is extremely rugged and long lasting.

The lid, closed by means of nickel plated brass knobs or stainless steel screws and a sealing "O ring gasket, assures a very high degree of protection against waves and brief immersions.

On the lid any type of COSEMA lantern can be assembled, directly or by a small pole to higher the focal plane.



**CSB148 Battery with respective box
CSC148 and CS155 Lantern**

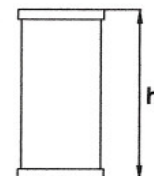
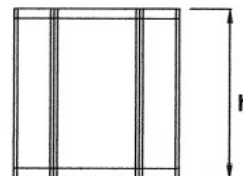
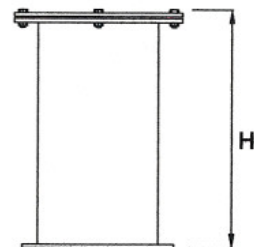
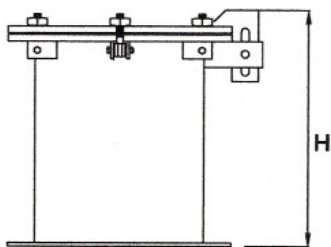
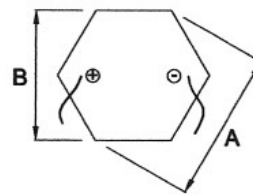
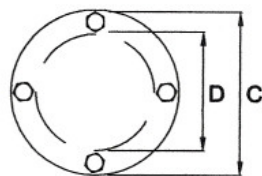
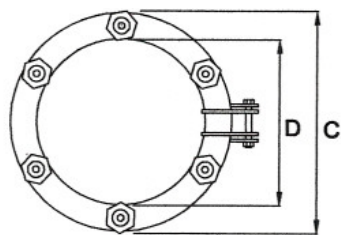


**CSB296 Battery with respective box
CSC296**



CO.SE.MA.

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Battery Box type
CSC

Battery Box type
CSM

Battery in tin
plate

Battery in
P.V.C. box

Battery box type	Battery type	Capacity (Ah)		Weight (Kg)		Dimensions in mm						Battery specifications		
		6V	12V	box.	bat	A	B	h	C	D	H	Cell	Shape	Container
CSM 2	CSB 24	36	-----	7	2.5	176	-----	145	255	183	230	Z-c	C	P.V.C.
CSM 1	CSB 28	42	-----	7	2.8	108	-----	280	196	127	325	Z-c	C	P.V.C.
CSM 2/D	CSB 48	72	-----	10	5	176	-----	280	255	183	460	Z-c	C	P.V.C.
CSM 1/D	CSB 56	84	-----	11.5	6	108	-----	540	196	127	650	Z-c	C	P.V.C.
CSM 1	CSB 90K6	90	-----	7	3.3	108	-----	280	196	127	325	Alk	C	P.V.C.
CSC 76	CSB 76	114	-----	15	6.6	163	143	255	275	185	330	Z-c	H	T-P
CSM 2	CSB 108K6	108	-----	7	4	176	-----	145	255	183	230	Alk	C	P.V.C.
CSM 1/D	CSB 180K6	180	-----	11.5	6.5	108	-----	540	196	127	650	Alk	C	P.V.C.
CSM 2/D	CSB 216K6	216	-----	10	7.5	176	-----	280	255	183	460	Alk	C	P.V.C.
CSC 148	CSB 148	222	-----	20	12.6	227	200	255	340	250	330	Z-c	H	T-P
CSC 148	CSB 96K	432	216	20	15.0	200	135	255	340	250	330	Alk	R	T-P
CSC 296	CSB 296	444	222	25	25.2	227	200	510	340	250	590	Z-c	H	T-P

Cells: Z-c zinc carbon Alk alkaline Shape: R Rectangular H Hexagonal C Cylindrical Container: T-P Tin plate

FORMULA FOR CALCULATION OF DRY BATTERY LIFE

D = battery life in days

P = total period (in sec.)

C = battery capacity in Ah.

L = flash length or total sum of flash lengths (in sec.)

A = lamp amperage

14 = mean annual operating time per day in hours (14 hours is a common value)

$$D = \frac{P \times C}{14 \times L \times A}$$

For example, a lantern having 12V.-0.25A. lamps with a flashing characteristic 0.5+1.5+0.5+4.5 = 7 seconds period and with a CSB296 battery, will have an autonomy of 444 days.