# FURUKAWA MARINE LEAD ACID BATTERIES

#### **Features**

#### Marine lead-acid batteries(SS) [Conformity with JIS F 8101]

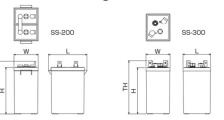
- •Leakage-free construction prevents leakage even when the battery is tilted 40 degrees in any direction.
- Outstanding reliability that many records of performance prove.
- •Transparent container that enables the observation of internal condition.
- ●The built-in hydrometer that enables the measurement of the specific gravity of electrolyte without laborious work of hydrometry(Option).

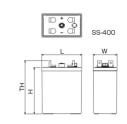
### **Specifications**

Туре	Nominal voltage[V]	Capacity[Ah] (10-hour rate)	Outer dimensions [Approx.mm]				Weight	Electrolyte
			Total height	Height	Width	Length	[Approx.kg] (incl.electrolyte)	quantity [Approx.liters]
SS-200	4	200	368	325	170	270	29	7
SS-300	2	300	375	325	170	195	25	6
SS-400	2	400	375	325	170	285	33	10



### Outline drawings with terminal position





# Safety Precautions Carefully read the operation manual before using the battery.

## **Danger**

- ●The room where the battery is installed must be ventilated so that the maximum hydrogen concentration is not more than 0.8%. Strage batteries generate hydrogen gas which may cause explosions.
- Do not install the battery near flames or in areas with poor ventilation where hydrogen concentration is 0.8% or higher. Otherwise, it may result in explosions and fire.
- Do not pour seawater into the marine lead-acid battery, as chlorine gas, which is harmful to human health, could be generated.

## **Cautions**

- The temperature range for using the battery is -15 $^{\circ}$ C to 45 $^{\circ}$ C. Using the battery out of this temperature range may cause deterioration to, or damage the battery by freezing or overheating.
- ●Do not use the battery under direct sunlight. It may damage battery components.
- ●Do not allow water and seawater to contact the battery. It may damage the battery, cause fire, or corrode the battery terminals and connector plate.
- Do not use the battery near sources of heat. It may damage the battery or shorten its life.
- ●Do not use the battery in dusty areas. It may cause the battery to short-circuit.
- Charge the battery under the charging conditions specified by Furukawa Battery. Charging the battery under other conditions may prevent full charge; cause the battery to leak, become hot, or explode; or lower performance and shorten the life of the battery.
- ●Install the battery in accordance with the ship's classification.
- ●The discharge current of the battery must be within 1 minute at 1.5C[A]. and 5 seconds at 3C[A]. Any duration beyond this range may damage the battery.
- ●The battery should be checked regularly, in accordance with the operation manual. If it is found that battery parameters are out of the ranges specified in the operation manual, solve the problem according to the steps presented in the manual. The usage beyond range specified in the operation manual may damage or burn the battery.



















