

HR Series

HR(High-Rate) Series of valve regulated lead acid (VRLA) batteries have been developed with high efficiency active materials to stimulate inside the battery with higher power output when the battery is discharged to a extent level of discharging. Along with high-density structure design for relatively smaller Inner resistance which will significantly improve the performance for high rate discharging when high power output service is needed.

Application

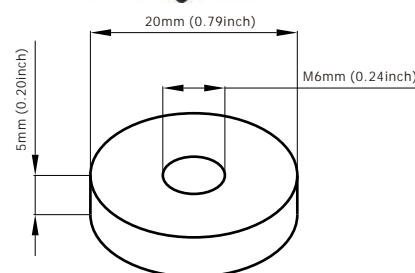
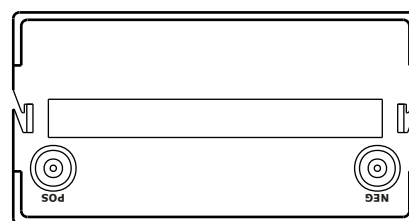
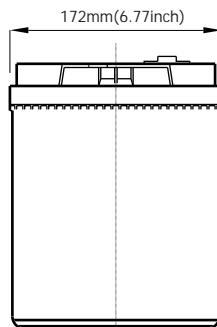
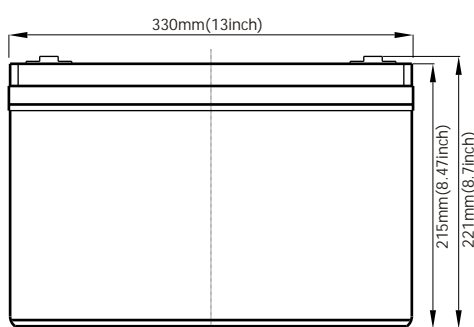
- Alarm System
- Cable Television
- Communication Equipment
- Control Equipment
- Security System
- Medical Equipment
- Toys
- UPS
- Emergency Power System

General Features

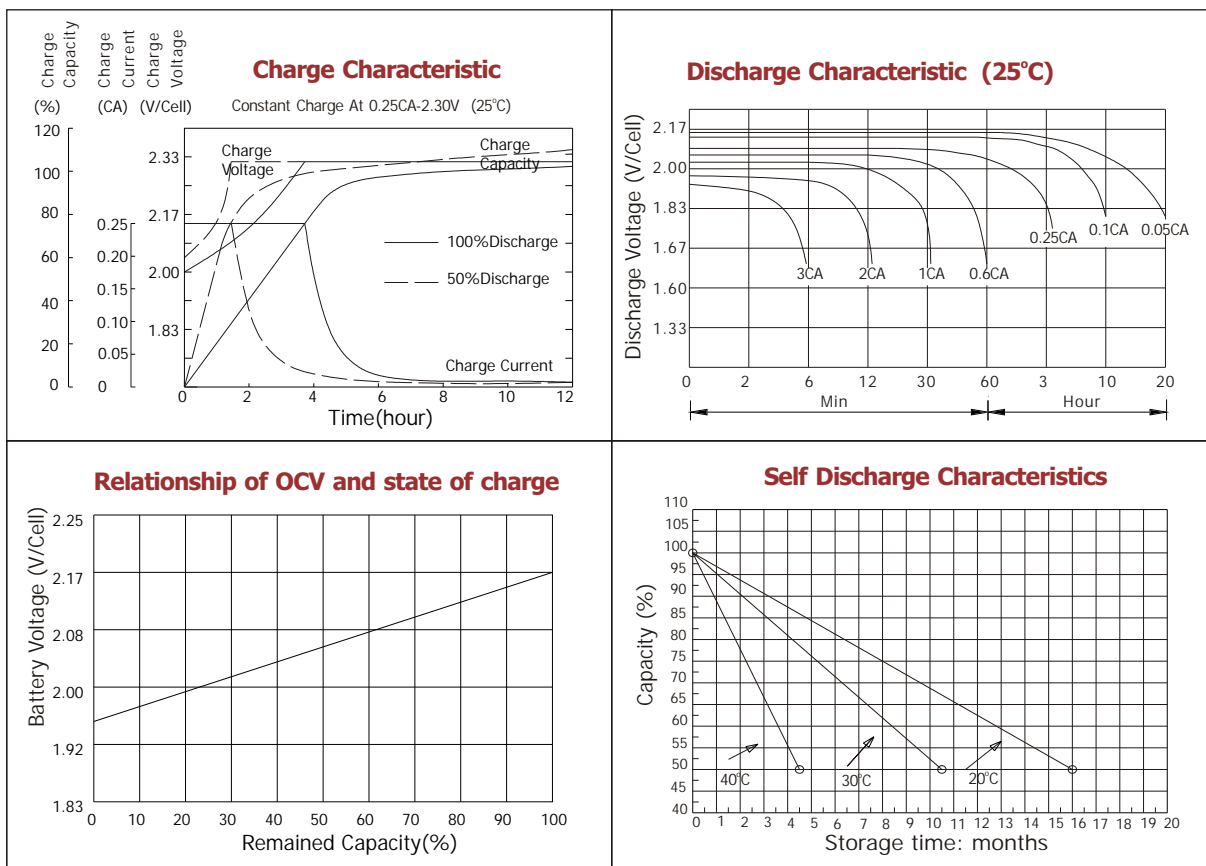
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.

Construction

- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy Resin
- Safety valveEPDR
- TerminalCopper
- SeparatorFibre glass
- ElectrolyteSulfuric acid

**Terminal Dimensions**

Battery Model	HR12-370W(370W to 1.67V, 15min)			
Designed Floating Life	8 Years			
Capacity(25°C)	20HR(5.8A,1.75V)	10HR(11.3A,1.75V)	5HR(19.8A,1.75V)	1HR(74A,1.75V)
	116AH	113AH	99AH	74AH
Dimensions	Length	Width	Height	Total Height
	330mm(13.00inch)	172mm(6.77inch)	215mm(8.46inch)	221mm(8.70inch)
Approx. Weight	32Kg (70.56 lbs)			
Internal Resistance	Full charged at 25°C: 0.0060 Ohm			
Self Discharge	3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-15V(-30mV/ °C), max. Current: 27.5A		13.6-13.8V(-20mV/ °C)	

**Constant current discharge ratings-amperes at 25°C**

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	437	272	205	125	78.2	34.3	21.0	11.4	6.17
1.67V	410	258	197	120	77.1	33.0	20.5	11.3	5.96
1.70V	376	249	193	109	74.8	30.8	20.1	11.3	5.86
1.75V	369	241	187	103	71.3	29.8	19.7	11.2	5.71
1.80V	330	230	169	96	66.7	28.6	18.5	11.0	5.60
1.85V	291	219	152	88.1	62.2	27.6	17.3	10.9	5.50

Constant power discharge ratings-watts at 25°C

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	767	491	375	225	141	60.9	35.4	23.5	12.3
1.67V	740	479	370	221	140	59.0	35.3	23.3	12.1
1.70V	697	474	367	207	138	56.3	34.8	23.2	11.9
1.75V	701	473	364	201	135	55.0	34.5	22.9	11.7
1.80V	642	466	337	191	127	53.4	33.5	22.6	11.5
1.85V	582	442	306	179	120	51.8	32.4	22.3	11.3

