

# CHR 24-12

12V 24AH

High Rated



## CHR24-12

Awaiting Image

## Physical Specification

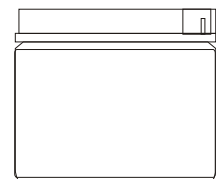
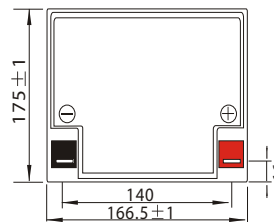
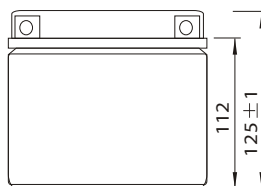
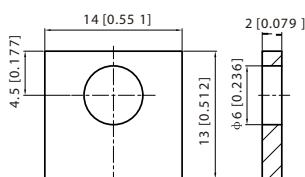
Part Number:	<b>CHR24-12</b>
Length:	<b>166.5 ± 2 mm (6.59 inches)</b>
Width:	<b>175 ± 2 mm (6.89 inches)</b>
Container Height:	<b>125 ± 2 mm (4.92 inches)</b>
Total Height (with terminal):	<b>125 ± 2 mm (4.92 inches)</b>
Approx Weight:	<b>Approx 8.8 kg (19.4lbs)</b>

## Specifications

	Nominal Voltage	12V	
	Nominal Capacity (20HR)	24AH	
Terminal Type	Standard Terminal	T3	
	Optional Terminal	-	
Container Material	Standard Option	ABS	
	Flame Retardant Option (FR)	ABS (UL94:VO)	
Rated Capacity	25.5 AH/2.55A	(20hr, 1.80V/cell, 25°C / 77°F)	
	24.0 AH/3.00A	(10hr, 1.80V/cell, 25°C / 77°F)	
	21.8 AH/4.37A	(5hr, 1.75V/cell, 25°C / 77°F)	
	20.1 AH/6.69A	(3hr, 1.75V/cell, 25°C / 77°F)	
	19.7 AH/19.7A	(1hr, 1.60V/cell, 25°C / 77°F)	
Max Discharge Current	360A (5s)		
Internal Resistance	Approx 12mΩ		
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)	
		Charge: 0 ~ 40°C (5 ~ 104°F)	
		Storage: -15 ~ 40°C (5 ~ 104°F)	
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
	Cycle Use	Initial Charging Current less than 7.2A. Voltage 14.4V~15.0V at 25 C(77 F)Temp. Coefficient -30mV/ C	
	Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25 C(77 F)Temp. Coefficient -20mV/ C	
Capacity affected by Temperature	40°C (104°F)	103%	
	25°C (77°F)	100%	
	0°C (32°F)	86%	
Design Floating Life at 20°C	12 + Years		
Self Discharge	Canbat batteries may be stored for up to 6 months at 25°C(77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.		

## Dimensions

### T3 Terminal



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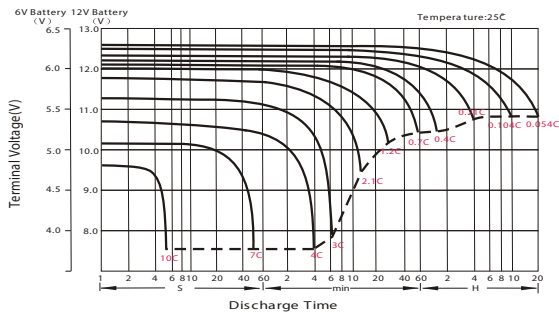
## Constant Power Discharge (Watts/Cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	68.0	51.4	41.2	34.6	26.8	19.9	15.9	8.64	6.05	4.77	4.05	3.46	2.87	2.45	1.41
1.80V/cell	79.3	58.1	45.2	37.2	28.7	21.6	17.0	9.25	6.51	5.09	4.20	3.67	3.00	2.55	1.43
1.75V/cell	89.4	63.8	49.4	40.0	29.9	22.4	17.8	9.59	6.69	5.21	4.37	3.76	3.08	2.58	1.45
1.70V/cell	98.5	69.5	52.8	42.0	31.0	23.4	18.3	10.0	6.88	5.34	4.47	3.84	3.14	2.62	1.47
1.67V/cell	108.6	75.1	56.1	44.6	32.8	24.0	19.0	10.3	7.10	5.53	4.56	3.93	3.19	2.68	1.49
1.60V/cell	119.8	81.5	59.9	47.5	34.6	24.9	19.7	10.6	7.32	5.70	4.69	4.02	3.22	2.70	1.50

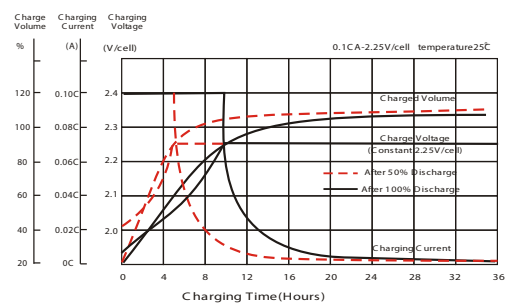
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	124.3	94.9	76.8	65.2	51.0	38.2	30.7	16.8	11.8	9.43	8.07	6.93	5.64	4.85	2.80
1.80V/cell	143.5	106.0	83.2	69.1	53.9	41.2	32.7	17.8	12.6	9.99	8.31	7.30	5.87	5.02	2.84
1.75V/cell	158.3	114.7	89.8	73.5	55.6	42.4	34.0	18.4	12.9	10.2	8.63	7.48	6.00	5.09	2.88
1.70V/cell	169.6	122.1	94.6	76.7	57.5	43.9	35.0	19.1	13.3	10.5	8.81	7.62	6.11	5.16	2.92
1.67V/cell	184.3	130.6	99.8	80.9	60.1	44.6	35.9	19.6	13.7	10.8	8.96	7.77	6.20	5.27	2.96
1.60V/cell	198.6	138.5	105.0	85.3	63.1	46.3	37.0	20.1	14.0	11.1	9.18	7.91	6.25	5.32	2.97

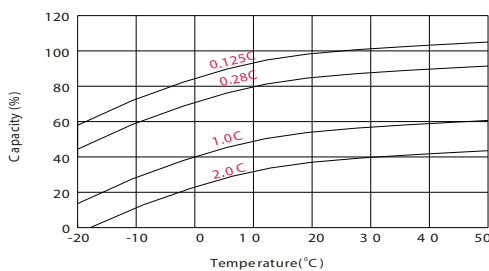
### Discharge Characteristics



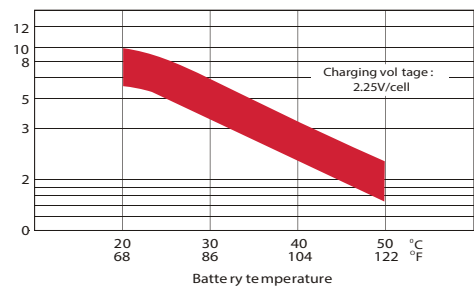
### Float Charging Characteristics



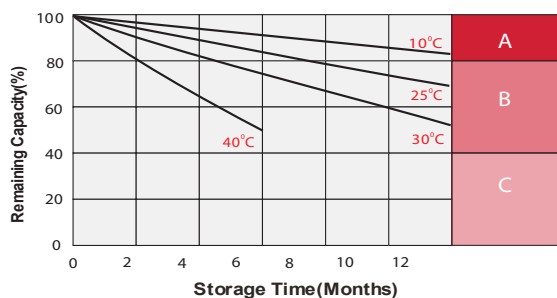
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Self Discharge Characteristics



**A**

No supplementary required  
(Carryout supplementary charge before use if 100% capacity is required.)

**B**

Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.25V/cell.  
 3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

**C**

Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.

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