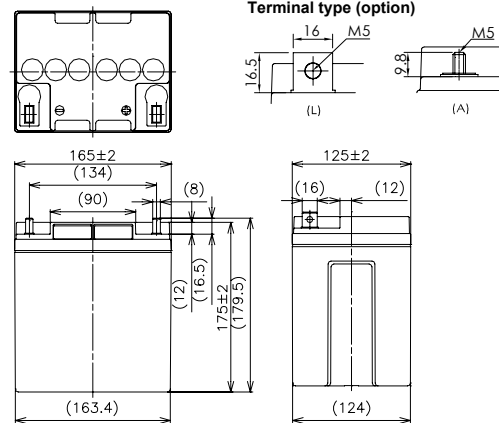


For standby power supplies
 Expected trickle life: 6 years at 25°C
 10 years at 20°C



※Contents indicated (including the recycle marking, etc) are subject to change without notice.

■Dimensions(mm)



Battery case resin: Flame-retardant (UL94V-0)

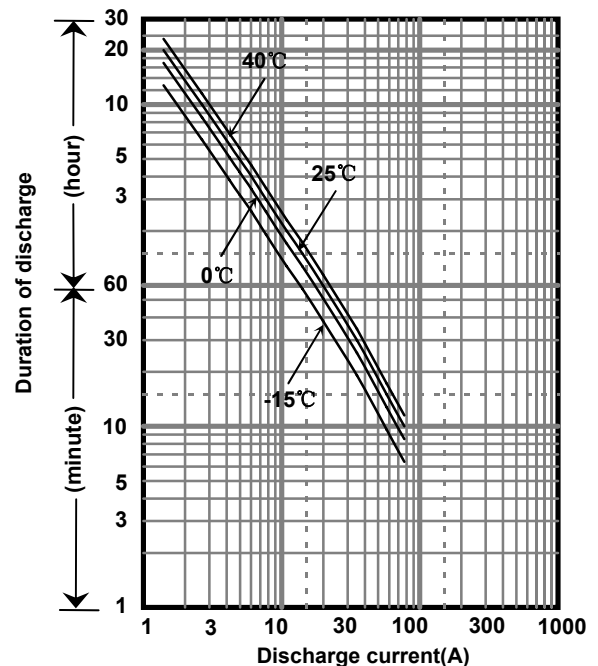
■Specification

Nominal Voltage	12V	
Rated Capacity(20HR)	28Ah	
Dimensions	Length	165 mm
	Width	125 mm
	Height	175 mm
	Total height	175 mm/179.5mm
Approx. Mass	9.40 kg	
Terminal	M5 threaded post	

■Characteristics

Capacity (25 °C)	20 hour rate	28Ah
	10 hour rate	26Ah
	3 hour rate	22Ah
	1 hour rate	21Ah
Internal Resistance (25 °C)	Fully charged battery	11 mΩ
Temperature Dependency of Capacity (20 hour rate)	40 °C	102%
	25 °C	100%
	0 °C	85%
	-15 °C	65%
Self Discharge (25 °C)	After 3 months	91%
	After 6 months	82%
	After 12 months	64%

■Duration of discharge vs. discharge current



■Watt Table(25°C)

Cut-off V	(Wattage/Battery)														
	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	1160	865	664	585	410	304	260	159	129	91.6	74.1	61.1	50.8	31.8	16.8
9.9V	1093	849	654	579	404	294	254	156	128	90.4	72.9	60.8	50.4	31.8	16.8
10.2V	1026	818	643	567	397	288	251	155	127	89.3	71.7	60.5	49.9	31.8	16.8
10.5V	976	784	621	545	386	282	247	154	126	88.1	71.1	60.2	49.5	31.8	16.8
10.8V	903	773	610	539	374	255	218	149	118	84.5	70.5	59.9	49.0	31.8	16.8

■Ampere Table(25°C)

Cut-off V	(Ampere/Battery)														
	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	104	77.2	57.7	50.4	35.0	25.9	22.1	13.5	10.9	7.70	6.20	5.10	4.30	2.60	1.40
9.9V	98.0	75.8	56.9	49.9	34.5	25.0	21.6	13.2	10.8	7.60	6.10	5.06	4.28	2.60	1.40
10.2V	92.0	73.0	55.9	48.9	33.9	24.5	21.3	13.1	10.7	7.50	6.00	5.03	4.25	2.60	1.40
10.5V	87.5	70.0	54.0	47.0	33.0	24.0	21.0	13.0	10.6	7.40	5.95	4.99	4.23	2.60	1.40
10.8V	81.0	69.0	53.0	46.5	32.0	21.7	18.5	12.6	10.0	7.10	5.90	4.95	4.20	2.60	1.40

All mentioned values are average values

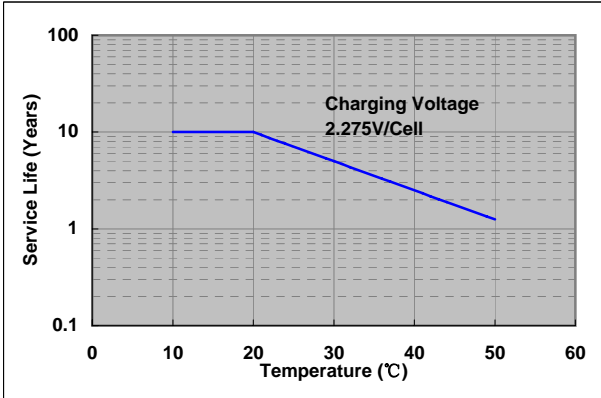
Charging Method (25°C)

Trickle use	Control voltage:13.6-13.8V Initial current:4.20A or smaller
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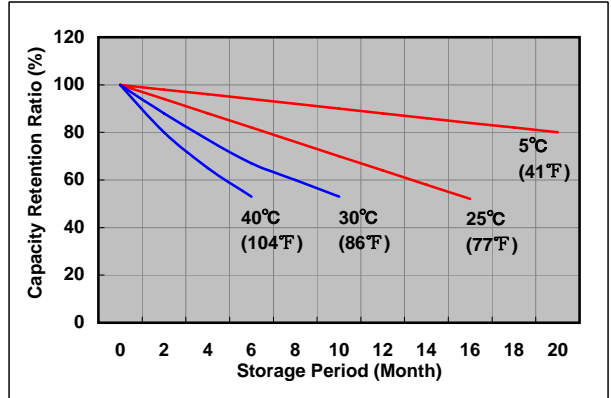
Cut off voltage

Discharge current	1.40A-5.60A	5.60A-14.0A	14.0A-28.0A	28.0A-56.0A	56.0A-84.0A
Cut off voltage(V)	10.5	10.2	9.9	9.3	8.7

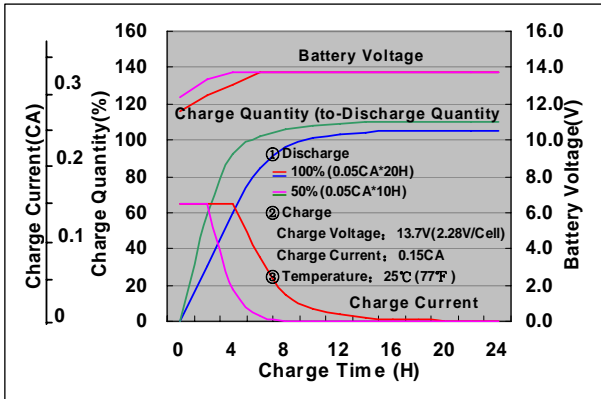
Influence of Temperature on Trickle life



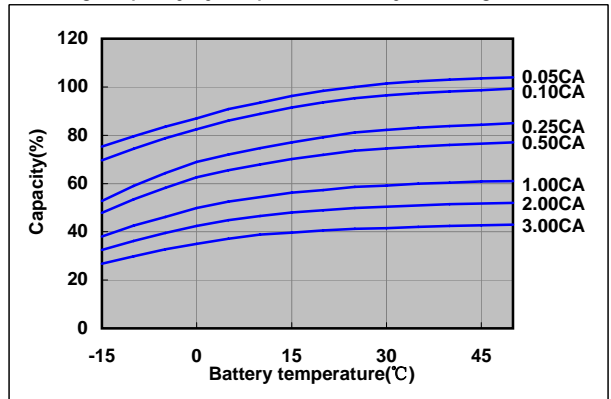
Residual capacity test result



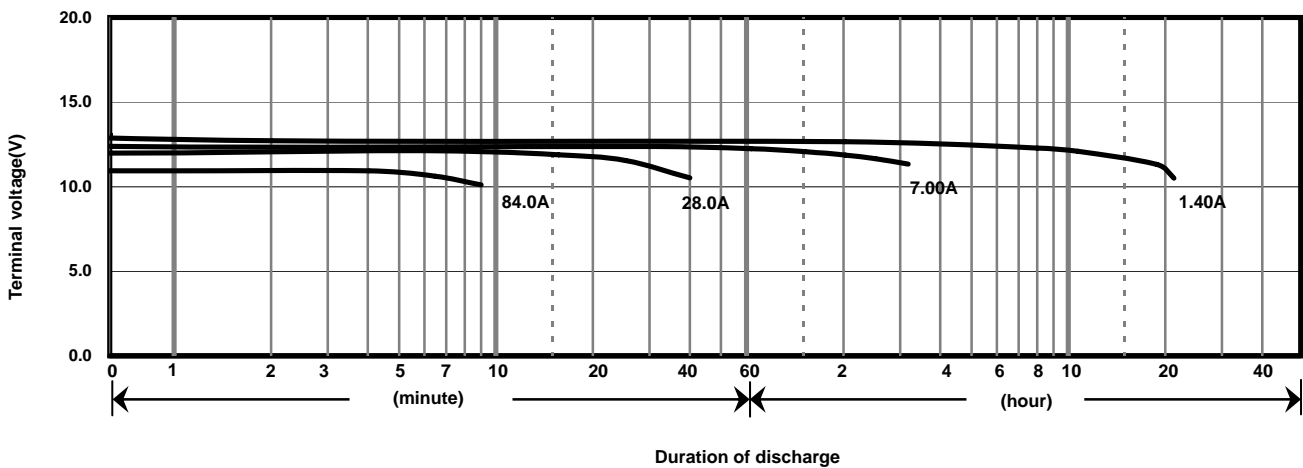
Constant-voltage constant-current charge characteristics for Trickle use



Discharge capacity by temperature and by discharge current



Discharge characteristics(25°C)



Caution

Due to the potential energy stored in the batteries, Please read 《Precautions for handling the Rechargeable Valve Regulated Lead Acid Batteries》 before using batteries. If improper handling or use of the batteries without understanding 《Precautions for handling the Rechargeable Valve Regulated Lead Acid Batteries》 may result in bodily injury caused by electrolyte leakage, heat generation, or explosion.

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