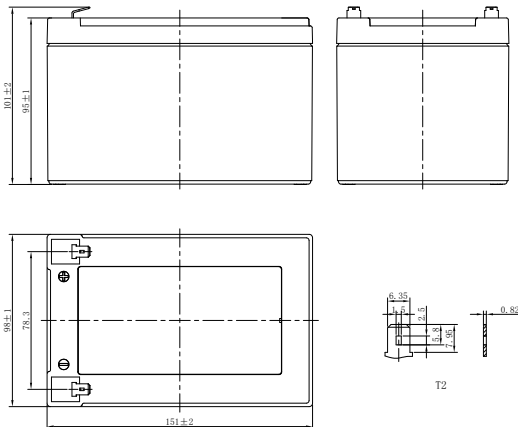


LS 12-12 (12V-12AH) LONG LIFE SERIES



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₂₀ 1.75V/cell	12Ah
Dimension	Length	151mm (5.94inches)
	Width	98mm (3.86inches)
	Container Height	95mm (3.74inches)
	Total Height	101mm (3.98inches)
Approx Weight	3.87kg (8.53lbs)	
Terminal	T2/T1	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	336A	
Internal Resistance (25°C)	Approx 14 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current (25°C)	0.3C	
Charge voltage (25°C)	Float Charge	Equalization Charge
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F). LS series batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	38.1	26.0	19.7	16.1	11.9	8.60	7.00	5.20	4.10	2.93	2.34	1.99	1.70	1.34	1.10	0.587
1.80V/cell	41.0	27.5	20.7	16.7	12.2	8.90	7.20	5.30	4.18	2.98	2.37	2.02	1.73	1.36	1.11	0.593
1.75V/cell	43.2	28.6	21.4	17.2	12.6	9.10	7.40	5.40	4.25	3.03	2.40	2.04	1.75	1.38	1.12	0.600
1.70V/cell	45.2	29.8	22.1	17.7	12.9	9.30	7.50	5.50	4.32	3.07	2.44	2.07	1.77	1.39	1.14	0.605
1.67V/cell	46.8	30.6	22.7	18.1	13.1	9.40	7.60	5.60	4.36	3.10	2.46	2.09	1.79	1.40	1.14	0.610
1.60V/cell	49.6	31.9	23.5	18.6	13.5	9.60	7.80	5.70	4.45	3.16	2.50	2.12	1.81	1.42	1.16	0.616
Constant Power Discharge (Watts/cell) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	72.1	49.4	37.8	31.0	22.9	16.8	13.7	10.1	8.03	5.77	4.61	3.93	3.37	2.66	2.18	1.17
1.80V/cell	76.8	52.0	39.4	32.0	23.6	17.1	14.0	10.3	8.16	5.85	4.67	3.98	3.42	2.70	2.21	1.19
1.75V/cell	80.0	53.7	40.5	32.8	24.0	17.5	14.2	10.5	8.28	5.93	4.72	4.03	3.45	2.73	2.23	1.20
1.70V/cell	83.0	55.5	41.6	33.5	24.5	17.8	14.4	10.6	8.38	6.01	4.78	4.08	3.49	2.75	2.25	1.21
1.67V/cell	85.1	56.7	42.5	34.1	24.9	18.0	14.6	10.7	8.46	6.06	4.82	4.10	3.52	2.77	2.27	1.22
1.60V/cell	88.6	58.4	43.7	35.0	25.5	18.3	14.9	10.9	8.60	6.15	4.89	4.16	3.56	2.81	2.29	1.23

LS 12-12 (12V-12AH) LONG LIFE SERIES



APPLICATIONS

- UPS and EPS
- Emergency light
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply, DC power supply

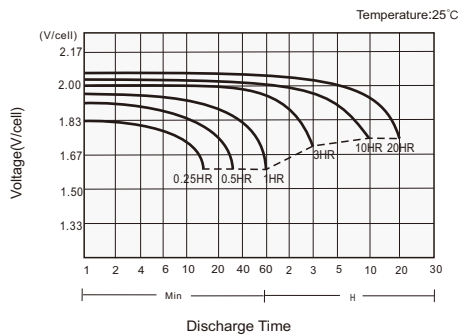
GENERAL FEATURES

- 10~12 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

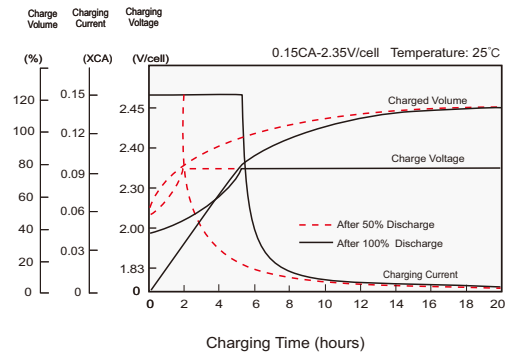
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Approved
- Manufactured in DESA, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

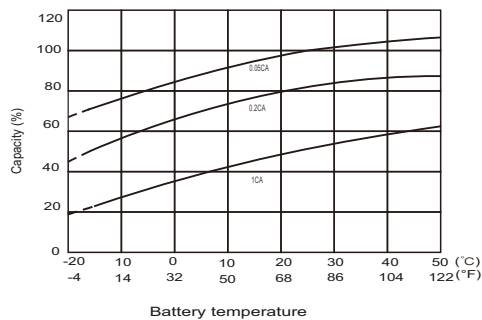
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

