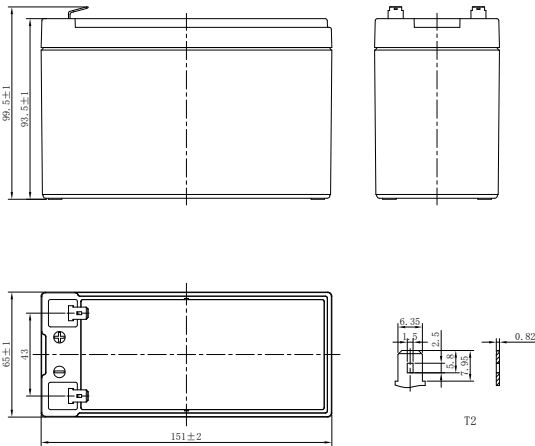


LS 12-7 (12V-7AH) LONG LIFE SERIES



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₂₀ 1.75V/cell	7.0Ah
Dimension	Length	151mm (5.94inches)
	Width	65mm (2.56inches)
	Container Height	93.5mm (3.68inches)
	Total Height	99.5mm (3.92inches)
Approx Weight	2.43kg (5.36lbs)	
Terminal	T2/T1	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	196A	
Internal Resistance (25°C)	Approx 21 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	17.4	15.5	12.3	10.0	7.46	5.48	4.47	3.22	2.60	1.86	1.47	1.24	1.06	0.837	0.676	0.343
1.80V/cell	18.3	16.3	12.8	10.3	7.65	5.58	4.56	3.28	2.64	1.89	1.49	1.26	1.08	0.847	0.684	0.347
1.75V/cell	19.2	17.1	13.2	10.6	7.83	5.70	4.64	3.33	2.68	1.92	1.51	1.28	1.09	0.857	0.692	0.350
1.70V/cell	20.1	17.9	13.7	11.0	8.01	5.80	4.72	3.39	2.72	1.95	1.53	1.29	1.11	0.868	0.700	0.354
1.67V/cell	20.7	18.4	14.0	11.2	8.12	5.87	4.77	3.42	2.74	1.96	1.54	1.30	1.11	0.875	0.705	0.356
1.60V/cell	21.9	19.5	14.6	11.6	8.37	6.03	4.88	3.49	2.80	2.00	1.57	1.33	1.13	0.889	0.716	0.361
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	33.7	29.7	23.6	19.3	14.4	10.6	8.70	6.29	5.08	3.66	2.90	2.46	2.11	1.66	1.34	0.686
1.80V/cell	35.2	31.0	24.4	19.8	14.7	10.8	8.84	6.38	5.15	3.71	2.93	2.49	2.13	1.68	1.36	0.693
1.75V/cell	36.7	32.3	25.2	20.3	15.0	11.0	8.96	6.46	5.21	3.76	2.97	2.52	2.15	1.70	1.37	0.700
1.70V/cell	38.1	33.6	25.9	20.8	15.3	11.1	9.09	6.55	5.28	3.80	3.00	2.54	2.18	1.72	1.39	0.708
1.67V/cell	39.1	34.4	26.4	21.1	15.4	11.2	9.17	6.60	5.32	3.83	3.02	2.56	2.19	1.73	1.40	0.712
1.60V/cell	41.1	36.2	27.4	21.8	15.8	11.5	9.34	6.72	5.41	3.90	3.07	2.60	2.23	1.75	1.42	0.722

LS 12-7 (12V-7AH) 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

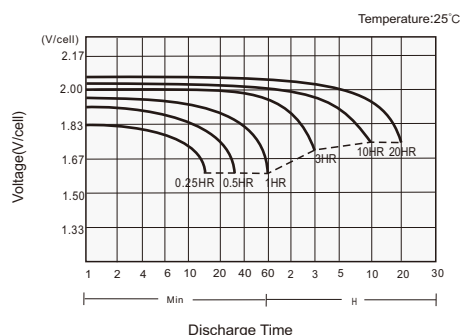
GENERAL FEATURES

- 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

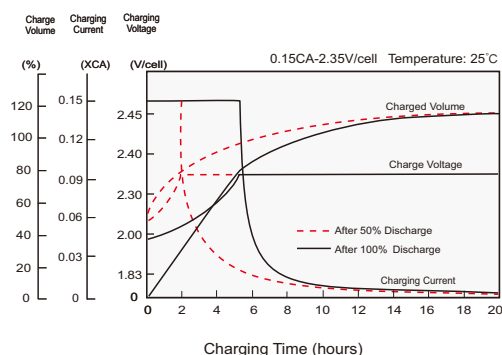
STANDARDS

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

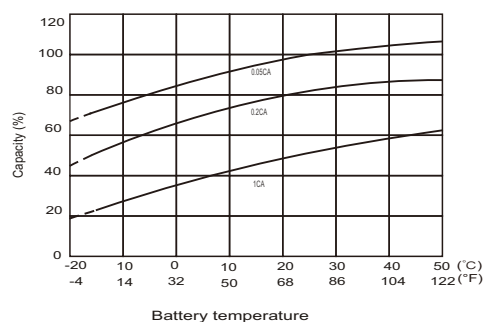
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

