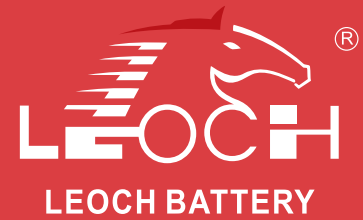




XP Series-Ultra High Rate

XP12-100(12V100W)

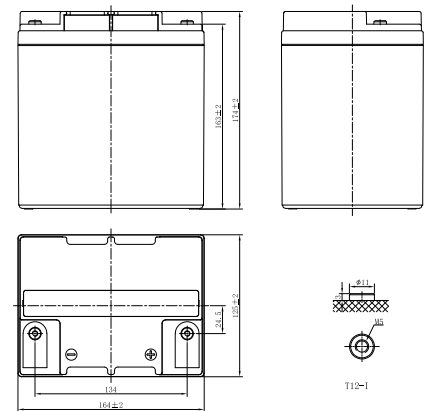


Specifications

Rated Voltage	12V	
Nominal Rate ($W_{15}, 1.67V/cell$)	100W/cell	
Nominal Capacity($C_{20}, 1.80V/cell$)	27.6Ah	
Dimension	Length	164±2mm (6.46 inches)
	Width	125±2mm (4.92 inches)
	Container Height	174±2mm (6.85 inches)
	Total Height	174±2mm (6.85 inches)
Approx. Weight	8.40 Kg (18.5 lbs)	
Terminal	M5	
Container Material	ABS: UL 94 HB or V-0 optional	
Rated Capacity (25°C)	27.6 Ah	(20hr, 1.38A, 1.80V/cell)
	26.2 Ah	(10hr, 2.62A, 1.80V/cell)
	24.1 Ah	(5hr, 4.82A, 1.75V/cell)
	21.4 Ah	(3hr, 7.14A, 1.75V/cell)
	18.0 Ah	(1hr, 18.0A, 1.67V/cell)
Max. Discharge Current	420A	
Internal Resistance (25°C)	Approx. 8.5mΩ	
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)	7.0A	
Charge voltage(25°C)	Float	13.5V
	Temp. Coefficient	-3mV/cell/°C
	Equalization	14.1~14.4V
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3%/month @ 25°C	



Layout



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	86.6	59.3	46.5	37.8	27.8	20.3	16.7	9.58	6.92	5.51	4.69	4.02	3.16	2.59	1.37
1.80V/cell	93.2	62.8	48.7	39.3	28.7	20.9	17.1	9.76	7.03	5.59	4.76	4.08	3.21	2.62	1.38
1.75V/cell	98.2	65.3	50.4	40.4	29.4	21.3	17.4	9.94	7.14	5.67	4.82	4.13	3.25	2.65	1.40
1.70V/cell	102.8	68.0	52.0	41.6	30.2	21.8	17.7	10.1	7.25	5.75	4.89	4.18	3.28	2.68	1.41
1.67V/cell	106.4	69.9	53.3	42.4	30.7	22.2	18.0	10.2	7.32	5.80	4.93	4.21	3.31	2.69	1.42
1.60V/cell	112.8	72.8	55.2	43.7	31.5	22.7	18.4	10.4	7.45	5.90	5.01	4.27	3.35	2.73	1.44

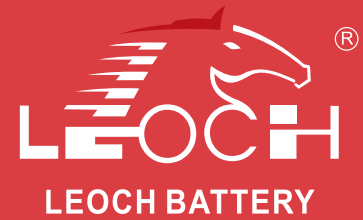
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	163.9	112.8	89.0	72.8	53.8	39.4	32.4	18.76	13.60	10.86	9.26	7.95	6.27	5.14	2.74
1.80V/cell	174.6	118.7	92.8	75.3	55.2	40.4	33.1	19.07	13.79	11.00	9.38	8.06	6.36	5.21	2.77
1.75V/cell	181.9	122.6	95.3	77.0	56.4	41.1	33.6	19.36	13.98	11.13	9.49	8.14	6.42	5.25	2.80
1.70V/cell	188.6	126.7	97.9	78.8	57.5	41.8	34.1	19.60	14.15	11.26	9.61	8.23	6.48	5.31	2.82
1.67V/cell	193.6	129.5	100.0	80.2	58.4	42.4	34.6	19.78	14.27	11.35	9.68	8.30	6.53	5.34	2.84
1.60V/cell	201.4	133.3	102.7	82.2	59.7	43.2	35.2	20.10	14.50	11.53	9.81	8.40	6.62	5.40	2.88



XP Series-Ultra High Rate

XP12-100(12V100W)



Applications

- UPS
- Hospitals & Testing Laboratories
- Emergency Power Supply
- Electric starting
- Telecommunications
- Data Centers

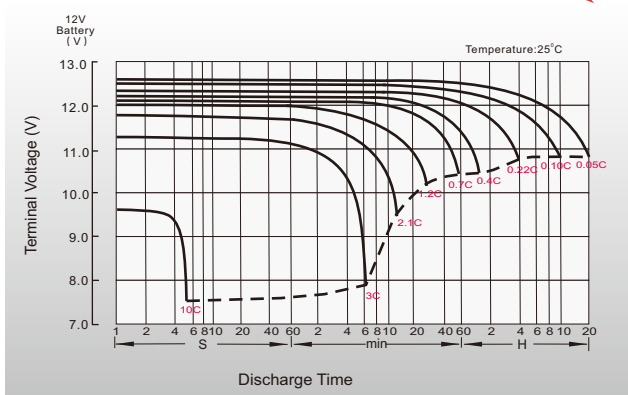
General Features

- Special designed grids for optimized high power density
- Oversized partition intercell welds, providing low resistance connections & minimal power loss
- Advanced lead tin calcium alloy, reduces grid corrosion & promotes long battery life
- Performance excels at high rates of discharge & recharge
- High integrity post seal for long life

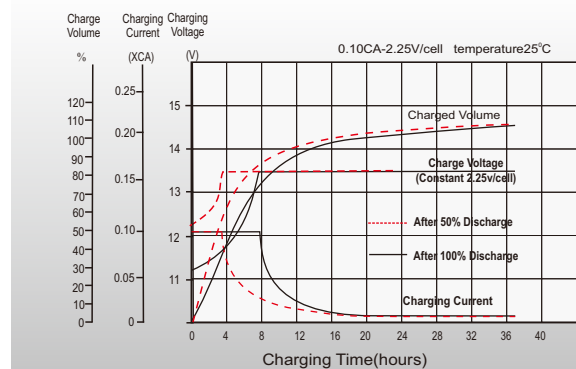
Standards

- Compliance with IEC 60896 standards
- Classified as "Long Life" according to Eurobat
- CE, UL Certified
- Manufactured in Leoch® IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

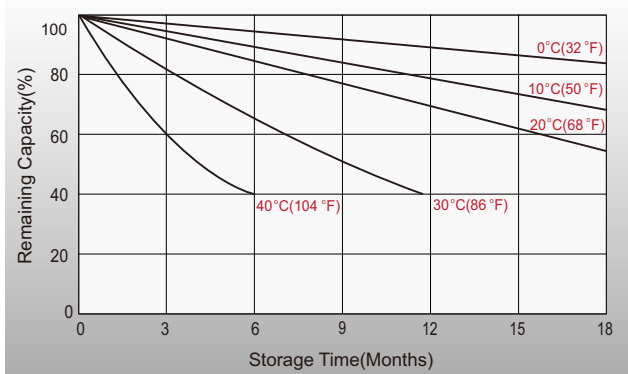
Discharge Characteristics



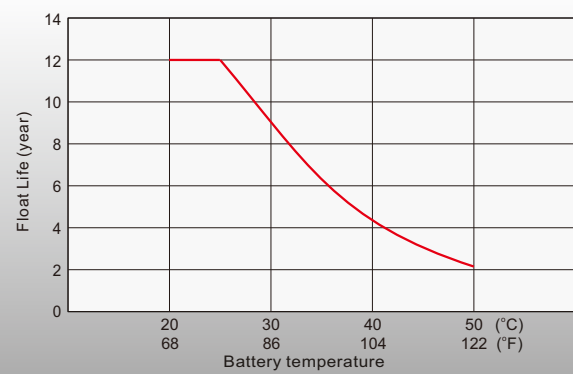
Float Charging Characteristics



Self Discharge Characteristics



Temperature Effects on Long Term Float Life



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