



# PLX-Pure Lead High Rate

## PLX12-400 (12V420W)

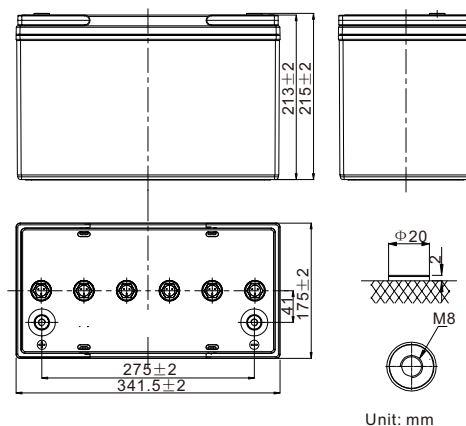


### Specifications

Rated Voltage	12V	
Nominal Rate ( $W_{15}$ , 1.67V/cell)	420W	
Nominal Capacity ( $C_{20}$ , 1.80V/cell)	100Ah	
Dimension	Length	341.5±2mm (13.44 inches)
	Width	175±2mm (6.89 inches)
	Container Height	213±2mm (8.39 inches)
	Total Height	215±2mm (8.46 inches)
Approx. Weight	32.0 Kg (70.4 lbs)	
Terminal	M8	
Container Material	PC-ABS flame retardant jar and cover to UL94 V-0	
Rated Capacity (25°C)	104.0 Ah	(20hr, 5.20A, 1.80V/cell)
	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	90.0 Ah	(5hr, 18.0A, 1.75V/cell)
	82.2 Ah	(3hr, 27.4A, 1.75V/cell)
	74.5 Ah	(1hr, 74.5A, 1.67V/cell)
Max. Discharge Current	1250A	
Internal Resistance (25°C)	Approx. 3.5mΩ(Fully charged)	
Operating Temp. Range	Discharge	-40 ~ 65°C (-40 ~ 149°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-20 ~ 40°C (-4 ~ 104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max. Charging Current (25°C)	30.0A	
Charge voltage (25°C)	Float	13.62V
	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	<p>PLX series batteries can be stored up to 24 months at 25°C(77°F), For higher temperatures the time interval will be shorter.</p> <p>Battery needs to be given a freshening charge when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.</p>	



### Layout



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	343.2	238.2	192.8	161.1	120.0	84.8	65.9	36.5	26.1	20.7	17.3	11.9	9.85	5.12
1.80V/cell	374.4	256.8	204.0	168.6	125.8	88.5	68.8	37.5	26.7	21.2	17.7	12.1	10.0	5.20
1.75V/cell	402.0	271.2	211.6	177.0	130.8	91.7	70.9	38.5	27.4	21.6	18.0	12.3	10.2	5.26
1.70V/cell	423.6	282.0	219.2	182.4	135.4	94.3	72.5	39.4	27.9	22.0	18.4	12.5	10.3	5.30
1.67V/cell	457.0	289.8	235.0	191.7	140.0	96.8	74.5	40.2	28.4	22.4	18.7	12.7	10.4	5.33
1.60V/cell	466.2	298.2	247.0	201.9	145.0	99.6	76.3	40.9	28.9	22.7	19.0	12.8	10.5	5.38

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	643.3	457.3	374.2	313.5	235.2	167.8	130.8	72.9	52.2	41.5	34.9	24.1	20.0	10.4
1.80V/cell	694.0	487.9	393.5	326.0	245.0	173.8	135.6	74.5	53.3	42.3	35.6	24.4	20.3	10.6
1.75V/cell	736.0	509.4	403.9	339.1	252.6	178.9	138.9	76.0	54.4	43.1	36.0	24.8	20.6	10.7
1.70V/cell	769.7	522.9	414.3	346.2	259.3	182.6	141.2	77.6	55.1	43.7	36.5	25.1	20.8	10.7
1.67V/cell	810.0	530.4	420.0	360.1	260.0	186.5	144.2	78.7	55.9	44.3	37.1	25.4	21.0	10.7
1.60V/cell	840.0	538.0	430.0	375.1	272.0	190.0	146.5	79.6	56.5	44.7	37.4	25.6	21.1	10.8



# PLX-Pure Lead High Rate PLX12-400 (12V420W)



## Applications

- UPS
- Emergency lighting
- Emergency power supply
- Electrical starting
- Power tools

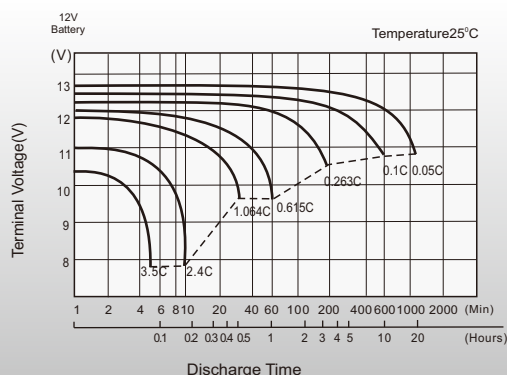
## General Features

- 15 years design life(25°C)
- Premium ABS+PC jar & covers, Flame Retardant to UL94 V-0
- High-rate performance, high energy density
- High quality AGM separators minimize electrical resistance to allow high current discharging properties

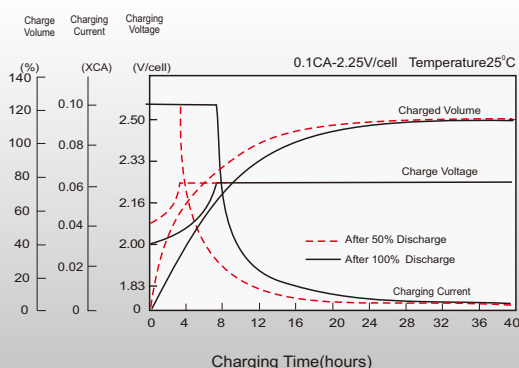
## Standards

- Compliance with IEC 60896 standard
- Classified as "Very Long Life" according to Eurobat
- CE, UL Certified
- Manufactured in Leoch®IATF 16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

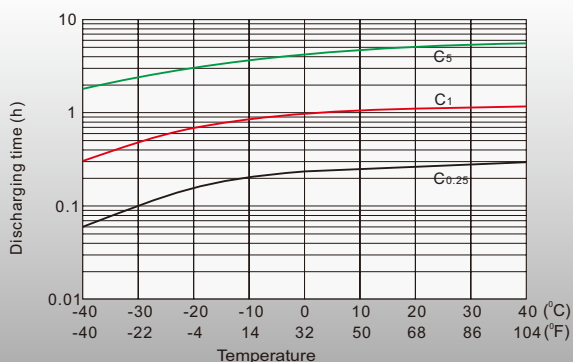
## Discharge Characteristics



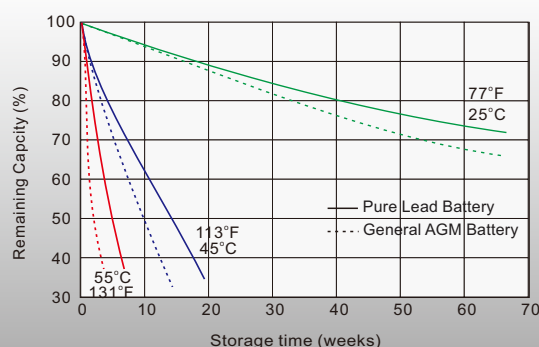
## Float Charging Characteristics



## Effects of Temperature on Discharging Time



## Self-discharge Characteristics



## Sales Offices Worldwide

### China Sales Office

5th Floor, Xinbaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com

### HongKong Sales Office

Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road,  
Tsuen Wan, New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +44 1452 690125  
E-mail: sales.hk@leoch.com

### Singapore Sales Office

No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 6863 6079  
Email: sales.sg@Leoch.com

### Australia Sales Office

2 /29 Tarlington Place, Smithfield. NSW 2164  
Australia  
Tel: 02 9756 0950  
E-mail: sales.au@leoch.com

### North America Sales Office

19751 Descartes  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us

### UK Sales Office

9B Wheatstone Court, Waterwells, Business Park,  
Gloucester, GL2-2AQ, UK United Kingdom  
Tel: +44(0) 1452 729428 / 1452 729696  
Fax: +44 1452 690125  
E-mail: Sales.Europe@leoch.com

### EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,  
Greece  
Tel: +30 210 5760318 (2 lines)  
E-mail: support\_EMEA@leoch.com

### India Sales Office

Shed no. A-53(b), 2nd Stage of Peenya Industrial Area,  
Bangalore North Taluk, Bangalore-560058, India  
Tel: +91-80-23440018/23440019  
Fax: +91-80-23440017  
E-mail: indiasales@leoch.com



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