



PLX-Pure Lead High Rate

PLX12-420 (12V420W)



Specifications

Rated Voltage	12V		
Nominal Rate ($W_{15}, 1.67V/cell$)	420W		
Nominal Capacity ($C_{10}, 1.80V/cell$)	100Ah		
Dimension	Length	340.9±2mm (13.42 inches)	
	Width	170±2mm (6.69 inches)	
	Container Height	213.2±2mm (8.39 inches)	
	Total Height	215.7±2mm (8.49 inches)	
Approx. Weight	33.5 Kg (73.9 lbs)		
Terminal	M6		
Container Material	PC-ABS flame retardant jar and cover to UL94 V-0		
Max. Discharge Current	1200A		
Internal Resistance (25°C)	Approx. 3.50mΩ(Fully charged)		
Operating Temp.Range	Discharge	-40 ~ 65°C (-40 ~ 149°F)	
	Charge	0 ~ 54°C (32 ~ 129°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%	

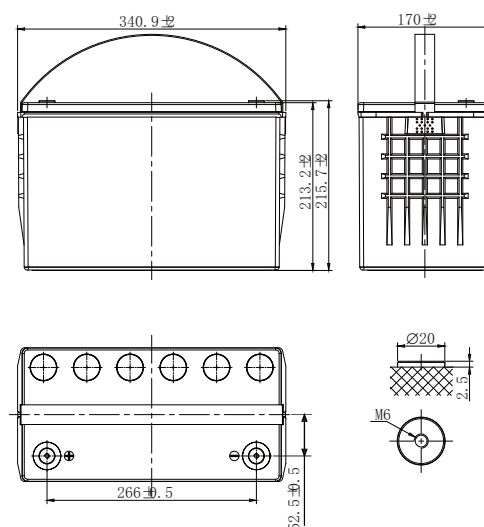
Self Discharge

PLX series batteries can be stored up to 24 months at 25°C(77°F), For higher temperatures the time interval will be shorter.

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.



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	288.7	214.5	169.8	153.0	111.6	84.4	67.1	37.8	27.1	21.7	17.6	11.9	9.80	5.10
1.80V/cell	332.4	247.3	189.2	167.2	119.3	88.7	69.8	39.6	28.3	22.6	18.4	12.3	10.0	5.20
1.75V/cell	363.4	270.7	205.0	178.4	126.9	91.2	71.8	40.7	29.0	23.2	18.8	12.5	10.1	5.26
1.70V/cell	391.5	292.7	218.1	187.7	131.8	94.5	74.6	41.3	29.6	23.6	19.1	12.6	10.3	5.31
1.67V/cell	437.0	308.3	230.1	194.9	137.1	98.2	76.2	42.1	29.9	23.9	19.3	12.8	10.3	5.35
1.60V/cell	472.3	313.5	237.8	200.4	139.8	99.7	77.5	42.7	30.3	24.2	19.5	12.9	10.4	5.39

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	573.6	419.4	334.0	302.6	221.8	168.5	134.3	76.1	54.7	44.1	35.8	24.4	20.1	10.6
1.80V/cell	649.0	478.8	368.6	327.5	235.1	175.7	138.9	79.1	56.7	45.6	37.3	25.1	20.5	10.7
1.75V/cell	696.7	519.2	395.8	346.3	247.9	179.1	141.7	80.8	57.8	46.6	37.9	25.4	20.6	10.8
1.70V/cell	756.7	550.0	418.0	360.4	254.7	183.8	146.0	81.4	58.6	47.0	38.2	25.5	20.8	10.8
1.67V/cell	815.0	570.0	420.0	372.1	263.6	189.8	148.4	82.4	58.9	47.4	38.3	25.7	20.8	10.8
1.60V/cell	857.9	575.0	443.0	378.8	266.0	191.1	149.6	82.9	59.1	47.5	38.3	25.7	20.9	10.9



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Applications

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

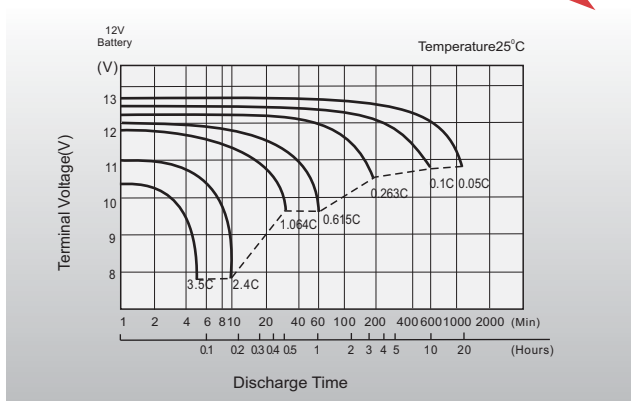
General Features

- 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

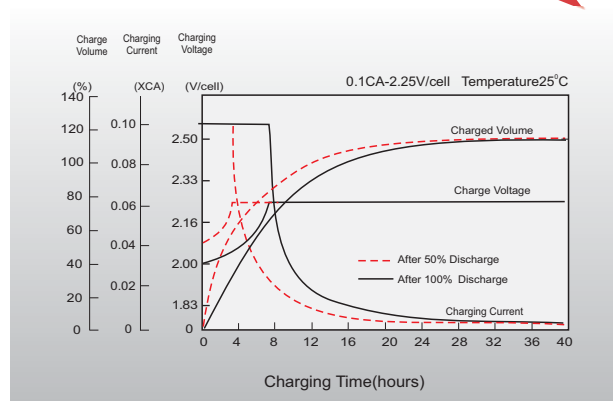
Standards

- Classified as "Very Long Life" according to Eurobat
- CE, UL Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

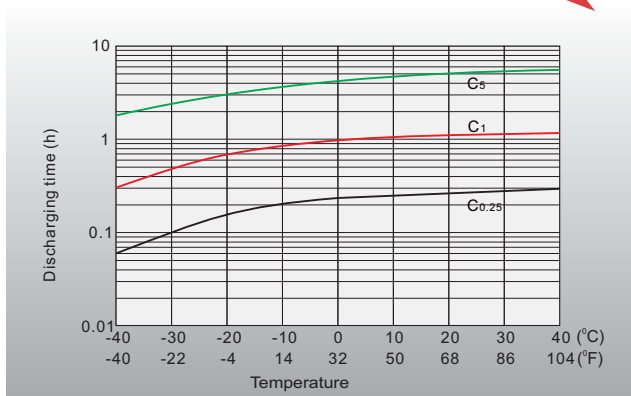
Discharge Characteristics



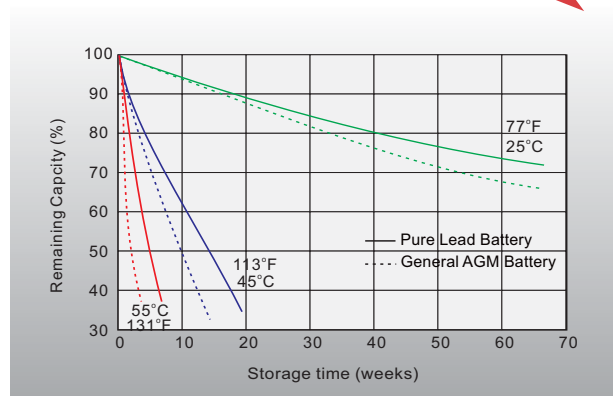
Float Charging Characteristics



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
Http:// www.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
Http:// www.leoch.eu

EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,
Greece
Tel: +30 210 5760318 (2 lines)
E-mail: support_EMEA@leoch.com
Http:// www.leoch.eu

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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