

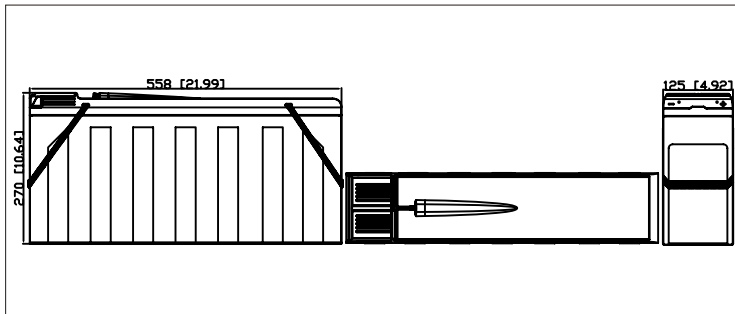
Model: 12NDF125

ACME F SERIES

General Features

The products are used as standby power for communication, power, military and broadcast and television system. They possess precise ABS glue seal technology between container and lid and patented post seal structure. The design float life is 12 years at 20°C(68°F).

Dimension



Parameter

Nominal Voltage	12V
Rated Capacity	125Ah (10hour rate) to 1.80V/cell @25°C(77°F)
Weight	45.0kg
Internal Resistance	About 5.70mohm
Operating Temperature Range	Discharge : -40°C~50°C(-40°F~122°F)
	Charge : -20°C~50°C(-4°F~122°F)
	Storage : -20°C~40°C(-4°F~104°F)
Recommended temperature	15°C~25°C(59°F~77°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	31.25A
Equalize and Cycle Service	2.35V~2.40V@25°C(77°F)
Self Discharge	The residual capacity is above 87% after 90 days storage(25°C/77°F)
Terminal	M6
Container Material	ABS

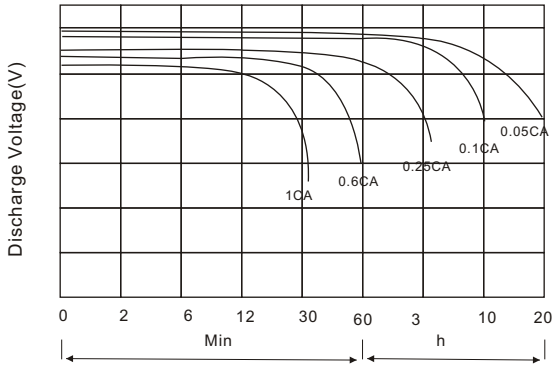
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	410	220	133	96.7	78.2	44.8	32.5	26.9	23.5	20.3	15.8	13.0	11.0	6.85	5.73
1.67V	385	212	131	96.0	77.7	44.6	31.9	26.8	23.3	20.2	15.6	12.8	10.9	6.79	5.67
1.70V	381	209	129	95.3	77.1	44.2	31.8	26.6	23.8	20.2	15.6	12.8	10.8	6.78	5.67
1.75V	350	202	128	94.6	76.0	43.1	31.4	26.3	23.4	20.1	15.4	12.7	10.8	6.76	5.67
1.80V	314	188	123	90.7	74.0	42.7	31.2	26.3	22.8	19.7	15.3	12.6	10.7	6.70	5.66
1.83V	299	173	120	87.7	70.8	42.2	30.1	25.0	22.1	19.0	15.0	12.1	10.2	6.68	5.57
1.85V	281	167	112	84.2	68.6	40.6	29.3	24.7	21.5	18.6	14.5	12.0	10.2	6.55	5.52

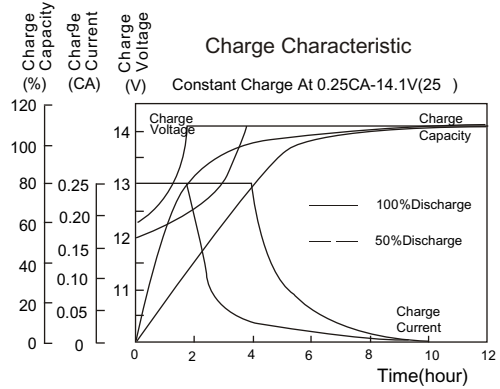
Discharge Data with Constant Power Unit: W (25°C, 77°F)

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	685	387	241	181	147	84.6	61.8	51.7	45.1	39.0	30.6	25.2	21.3	13.6	11.4
1.67V	659	380	239	180	146	84.4	61.0	51.6	45.0	39.0	30.3	25.0	21.2	13.5	11.4
1.70V	655	376	239	180	146	84.0	61.0	51.4	46.0	39.0	30.2	24.8	21.0	13.5	11.3
1.75V	612	373	238	180	144	83.6	60.3	51.4	45.5	38.9	29.9	24.7	21.0	13.5	11.3
1.80V	561	352	233	175	143	83.3	60.2	51.2	44.4	38.5	29.9	24.6	20.9	13.5	11.3
1.83V	536	323	230	170	137	82.3	58.8	49.3	43.5	37.4	29.6	24.0	20.3	13.4	11.2
1.85V	501	315	213	163	133	79.6	57.2	48.7	42.4	36.6	28.7	23.8	20.4	13.2	11.1

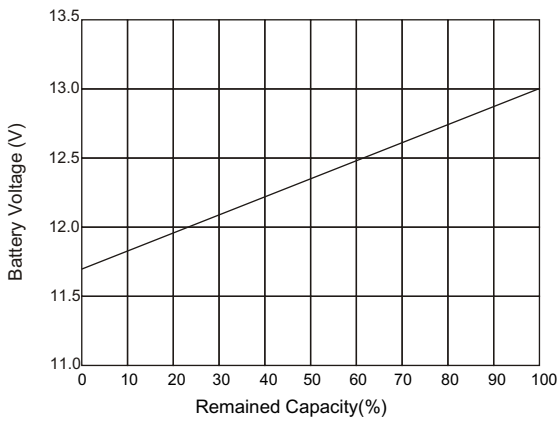
Terminal Voltage(V) and Discharge Time (25°C, 77°F)



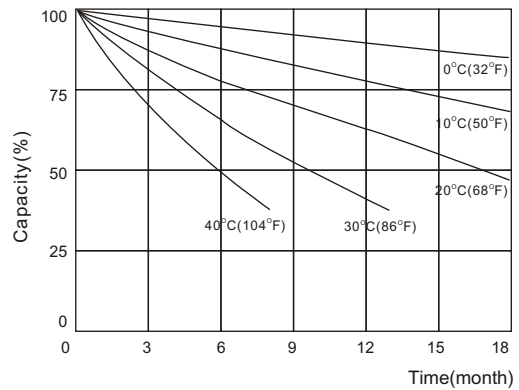
Battery Voltage and Charge Time



Relationship of OCV and state of charge



Capacity Retention Characteristic



Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle	25°C	2.40	2.35~2.45	0.25C
Standby	25°C	2.25	2.23~2.27	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.55	1.30
Discharge Current (A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

NARADA POWER SOURCE CO.,LTD.

No.459 Wensan Road, Hangzhou, Zhejiang, P.R.China
Tel:+86-571-28827013 Fax:+86-571-85126942
Website:www.naradabattery.com E-mail:intl@narada.biz

