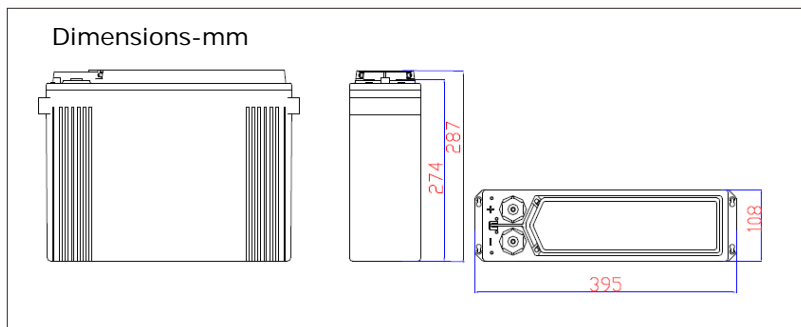


## Model: 12NDT-100S

The Acme T range of front access VRLA batteries has been specifically designed for applications using 19" and 23" cabinets, especially telecoms. Reliability is assured with the patented post seal and a state-of-the-art design developed to comply with the latest IEC, British and Telcordia standards. A 12+ years design life and centralized venting system add to the suitability and flexibility of this superior range.



## Specifications

Battery Model	12NDT100S
Nominal Voltage	12V
Rated Capacity	100Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	31.0 kg
Internal Resistance	Approx 6.11mΩ
Temperature Ranges	Operation (maximum): -40°C to 55°C(-40°F to 131°F)
	Operation (recommended): 15°C to 25°C(59°F to 77°F)
	Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	25 A
Equalize and Cycle Service	2.35V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 91% after 90 days storage(25°C/77°F)
Terminal	M6 Female
Terminal Hardware Torque	8~10Nm
Container Material	ABS (V0 optional)

## Constant Current Discharge Characteristics: Units: Amperes (25°C, 77°F)

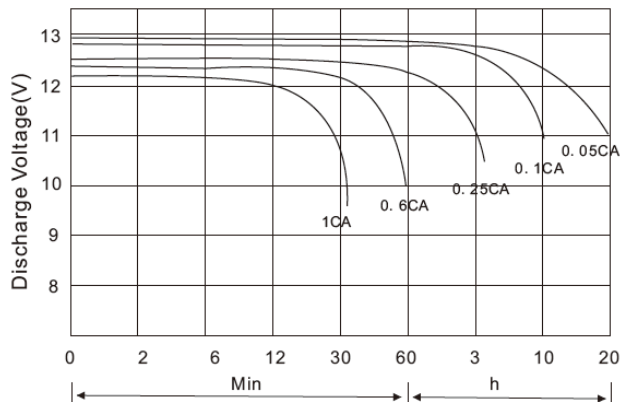
End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	310	171	103	79.5	63.7	39.9	28.3	22.1	18.3	15.6	12.1	10.3	8.78	5.65	4.83
1.67V	301	169	102	78.9	63.2	39.6	28.2	22.0	18.1	15.5	12.0	10.2	8.72	5.62	4.80
1.70V	294	167	101	78.4	62.8	39.4	28.0	21.8	18.0	15.4	12.0	10.2	8.67	5.59	4.80
1.75V	278	162	100	77.3	62.1	39.0	27.7	21.6	17.8	15.2	11.9	10.1	8.62	5.58	4.79
1.80V	253	155	99.0	75.2	60.6	38.2	27.2	21.3	17.6	15.0	11.7	10.0	8.57	5.54	4.78
1.83V	236	147	97.0	72.9	59.0	37.5	26.8	21.0	17.4	14.9	11.6	9.90	8.48	5.53	4.77
1.85V	226	142	94.0	71.2	57.7	36.9	26.5	20.8	17.2	14.7	11.5	9.80	8.38	5.46	4.70

## Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

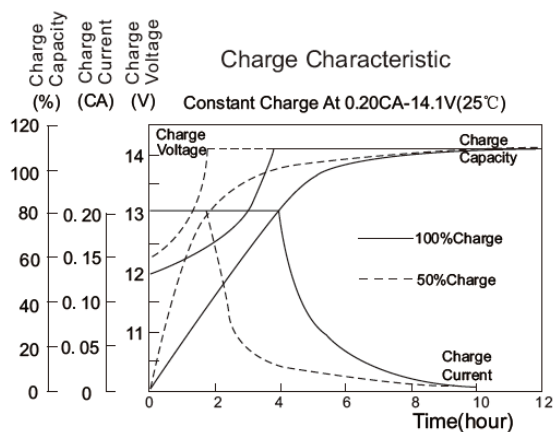
End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	540	322	208	156	126	79.9	57.0	44.6	36.9	31.5	24.5	20.8	17.8	11.5	9.84
1.67V	534	318	206	155	125	79.4	56.7	44.4	36.6	31.3	24.3	20.6	17.6	11.3	9.65
1.70V	528	314	204	154	124	79.2	56.6	44.3	36.6	31.2	24.3	20.6	17.6	11.2	9.58
1.75V	509	306	200	151	123	78.6	56.2	44.1	36.4	31.0	24.1	20.4	17.4	11.0	9.38
1.80V	473	292	193	147	120	77.4	55.6	43.6	36.0	30.7	23.9	20.2	17.2	10.9	9.21
1.83V	446	280	188	144	117	76.3	55.0	43.2	35.7	30.5	23.7	20.1	17.0	10.7	9.09
1.85V	426	271	183	140	115	75.1	54.1	42.6	35.2	30.0	23.3	19.7	16.7	10.5	8.85

## Model: 12NDT-100S

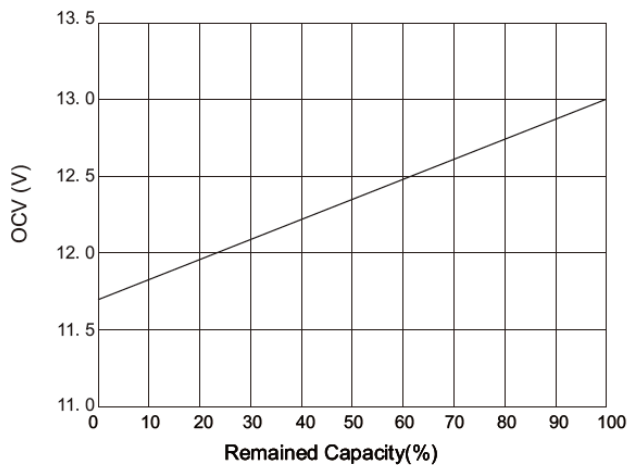
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



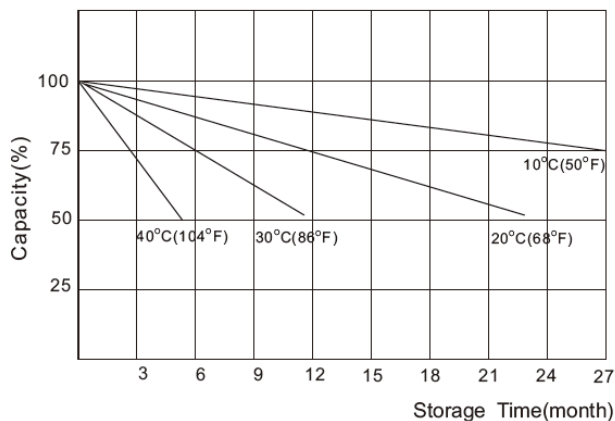
Battery Voltage Vs. Charge Time



Relationship of OCV Vs. 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	2.35~2.40	0.25C
Standby	25°C	2.25	2.23~2.27	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.80	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

