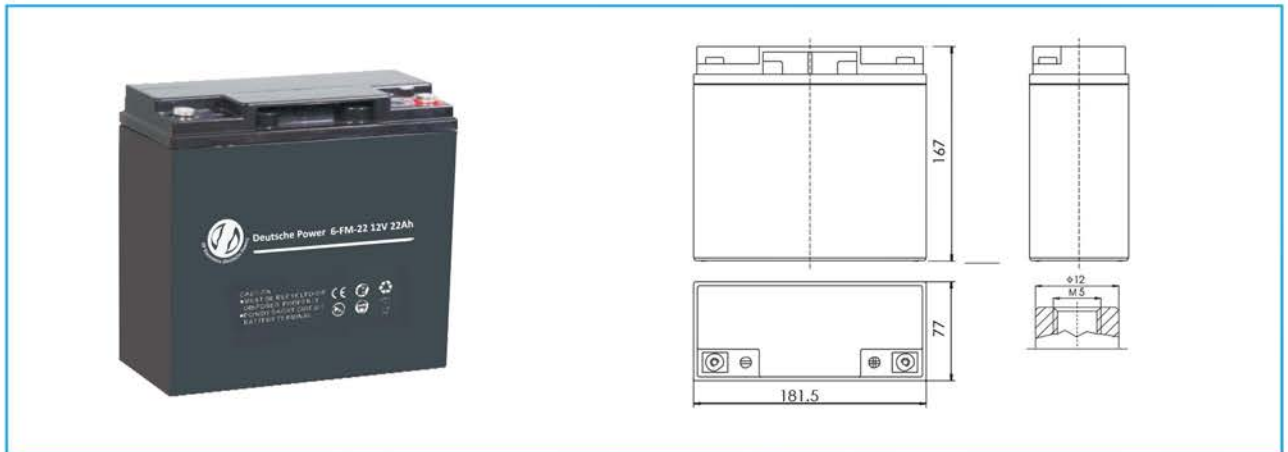


# 6-FM/NP22

FM/NP Battery Series (General Use Battery)



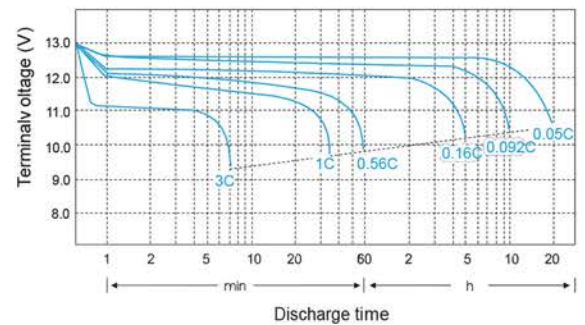
## Specifications

Nominal Voltage		12V
Rated Capacity(20 hour rate)		22Ah
Dimensions	Total Height (with terminals)	6.57inches (167mm)
	Height	6.57inches (167mm)
	Length	7.15inches (181.5mm)
	Width	3.03inches (77mm)
Weight		Approx. 13.86pound (6.3kg)

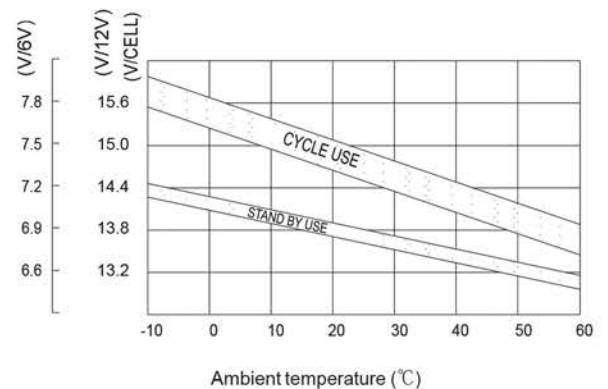
## Characteristics

Capacity 77°F(25°C)	20 hour rate (1.1A)	22Ah
	10 hour rate (2.05A)	20.5Ah
		17.6Ah
		13.2Ah
	15 minute Rate (38.7A)	9.7Ah
Internal Resistance	Full charged Battery 77°F(25°C)	12m Ω
Capacity affected by Temperature (20 hour rate)	104°F(40°C)	102%
	77°F(25°C)	100%
	32°F(0°C)	85%
Self-Discharge 77°F(20°C)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	81%
	Capacity after 12 month storage	60%
Max. Discharge Current 77°F(25°C)	330A(5S)	
Terminal	M4	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 6.6A Voltage 14.4~14.7V/77°F(25°C)
	Float	Voltage 13.5~13.8V/77°F(25°C)

## Discharge Curves 77°F(25°C)



## Relationship between charge voltage and temperature



## Constant Current Discharge (AMPERES @25°C)

F.V/Time	5Min	10Min	15Min	30Min	60Min	2H	3H	4H	5H	10H	20H
9.60	83.82	53.24	42.68	23.76	14.52	8.21	5.65	4.53	3.83	2.09	1.11
9.90	81.84	51.70	41.14	23.10	14.15	7.92	5.59	4.49	3.81	2.07	1.11
10.20	78.10	49.50	39.82	22.66	13.75	7.81	5.52	4.44	3.78	2.05	1.10
10.50	74.80	47.52	38.28	22.44	13.42	7.70	5.50	4.40	3.74	2.05	1.10
10.80	70.40	47.08	36.30	21.78	12.98	7.48	5.41	4.29	3.70	2.00	1.08

## Constant Power Discharge (WATTS PER CELL @25°C)

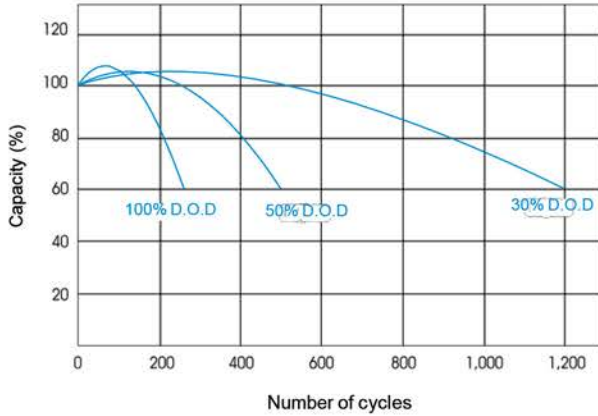
F.V/Time	5Min	10Min	15Min	30Min	60Min	2H	3H	4H	5H	10H	20H
9.60	933.75	598.42	484.84	270.86	167.56	95.91	67.23	53.98	45.63	25.00	13.39
9.90	912.52	581.63	467.76	264.50	163.53	92.65	66.56	53.54	45.53	24.81	13.34
10.20	871.60	557.37	453.15	259.68	159.09	91.53	65.85	53.06	45.21	24.62	13.29
10.50	836.52	536.03	436.01	257.39	155.40	90.40	65.62	52.58	44.73	24.62	13.24
10.80	787.07	532.00	413.87	250.03	150.57	87.89	64.67	51.31	44.25	24.07	13.02

# 6-FM/NP22

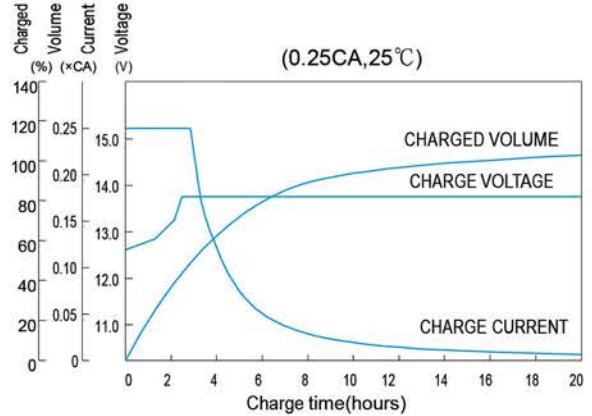
FM/NP Battery Series (General Use Battery)

The operating environment temperature above 40°C should be avoided, After long term storage, The battery actual capacity would be less than the rated capacity. Full capacity will be obtained through several charge/discharge cycles. To get the longest life, Deutsche Power battery should be fully charged before storage

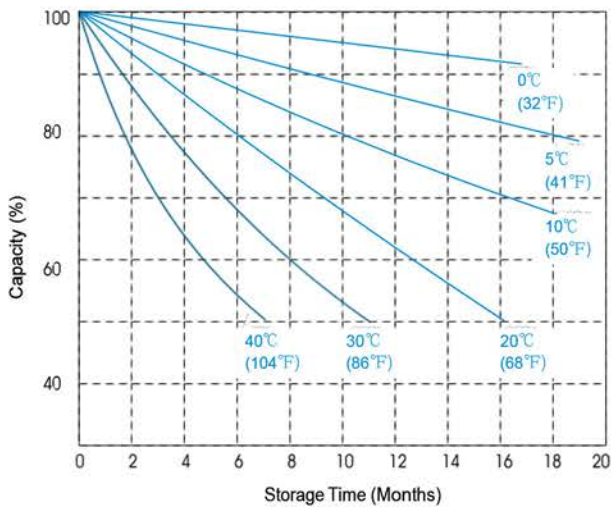
## Cycle service life in relation to depth of discharge



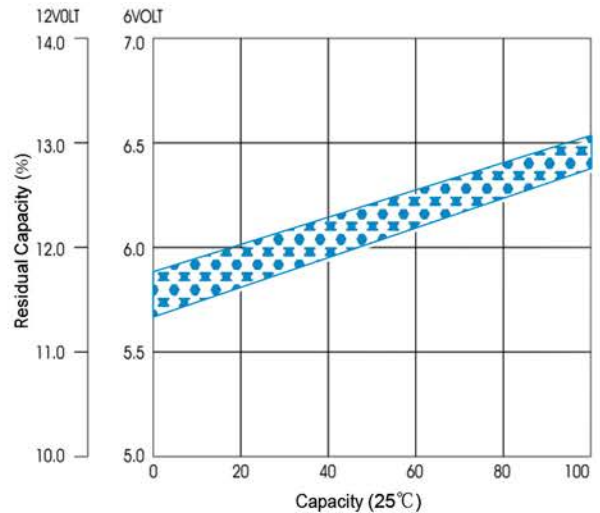
## Constant voltage charge characteristic



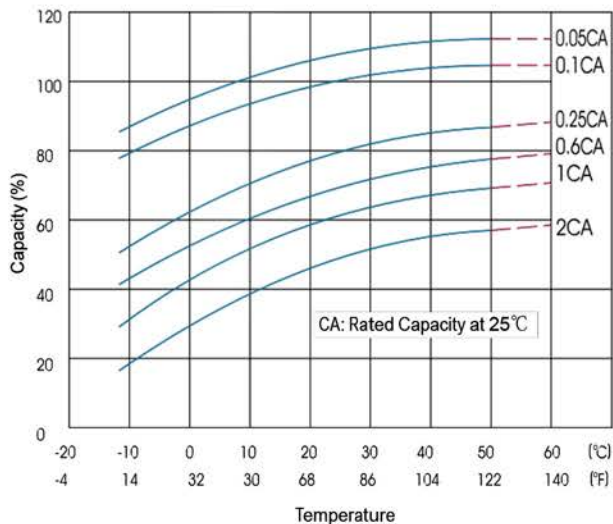
## Self-Discharge Characteristics



## Relationship of OCV and Residual Capacity % (25°C)



## Temperature effects on capacity



## Temperature effects float life

