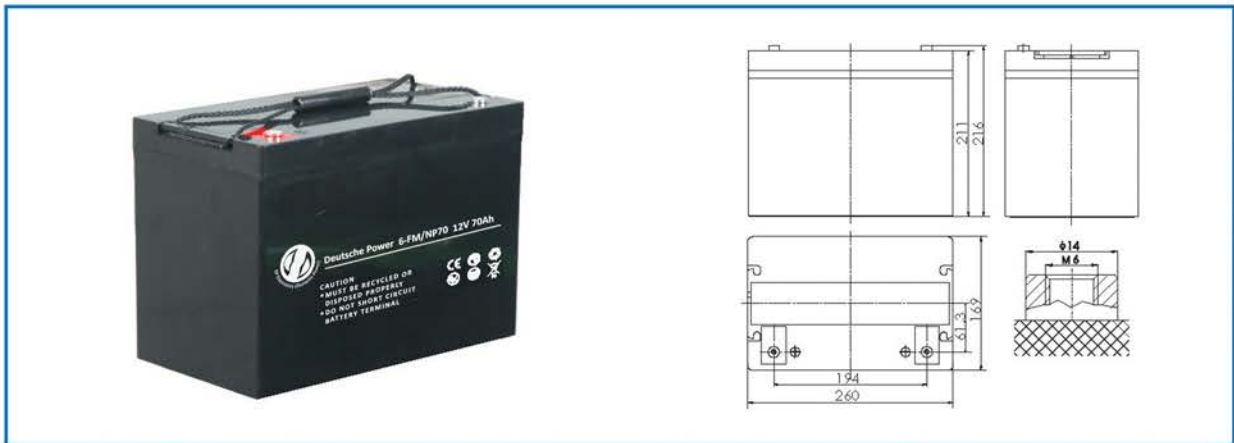


# 6-FM/NP70

FM/NP Battery Series (General Use Battery)



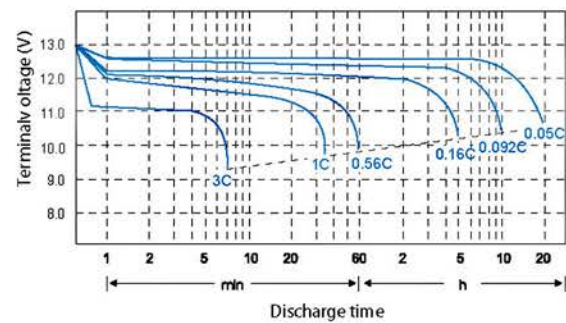
## Specifications

Nominal Voltage	12V	
Rated Capacity(20 hour rate)	70Ah	
Dimensions	Total Height (with terminals)	8.51 inches (216mm)
	Height	8.31 inches (211 mm)
	Length	10.24 inches (260mm)
	Width	6.65 inches (169mm)
Weight	Approx. 47.08pound(21.4kg)	

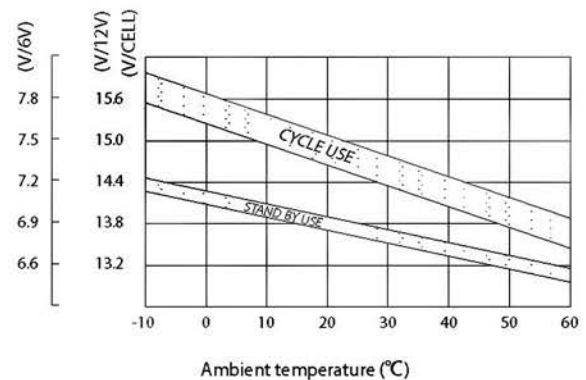
## Characteristics

Capacity 77°F(25°C)	20 hour rate (3.5A)	70.0Ah
	10 hour rate (6.44A)	64.4Ah
	5 hour rate (11.2A)	56.0Ah
	1 hour rate (42A)	42.0Ah
	Full charged Battery 77°F(25°C)	28.5Ah
Internal Resistance	15 minute Rate (114A)	75mΩ
Capacity affected by Temperature (20 hour rate)	104°F(40°C)	102%
	77°F(25°C)	100%
	32°F(0°C)	85%
	5°F(-15°C)	65%
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)	665A(5S)	
Terminal	M1	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 21 A
		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	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.65	151.9	117.6	71.4	56.1	37.9	26.46	18.27	12.25	8.68	6.86	5.89	3.03
1.70	143.5	109.9	60.8	53.0	36.3	25.83	17.50	11.83	8.33	6.71	5.71	2.98
1.80	121.1	95.9	54.9	50.1	34.6	24.71	16.52	11.20	7.84	6.44	5.55	2.93

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

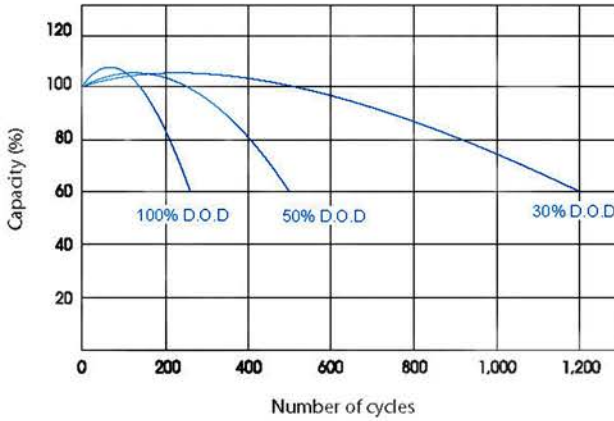
F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.60	273	209	137	103	83.2	48.8	34.3	22.5	15.3	12.7	11.0	5.76
1.65	271	207	133	102	82.3	48.2	33.9	22.3	15.2	12.5	10.9	5.74
1.67	269	204	132	100	81.2	47.6	33.8	22.2	15.1	12.4	10.7	5.72
1.70	265	202	130	98.9	80.7	46.9	33.6	21.8	14.9	12.1	10.7	5.69
1.75	247	196	119	97.1	80.5	46.4	33.1	21.7	14.8	12.0	10.7	5.67
1.80	231	183	112	96.1	80.1	45.6	32.4	21.6	14.6	11.9	10.4	5.66
1.85	190	161	104	88.4	74.5	44.6	32.0	20.5	14.0	11.8	10.2	5.33

# 6-FM/NP70A

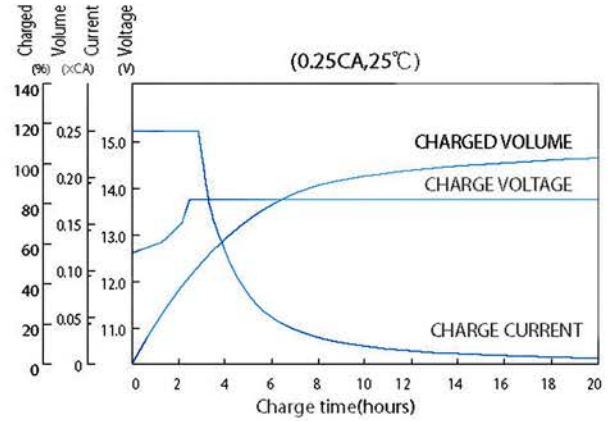
FM/NP Battery Series (General Use Battery)

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.

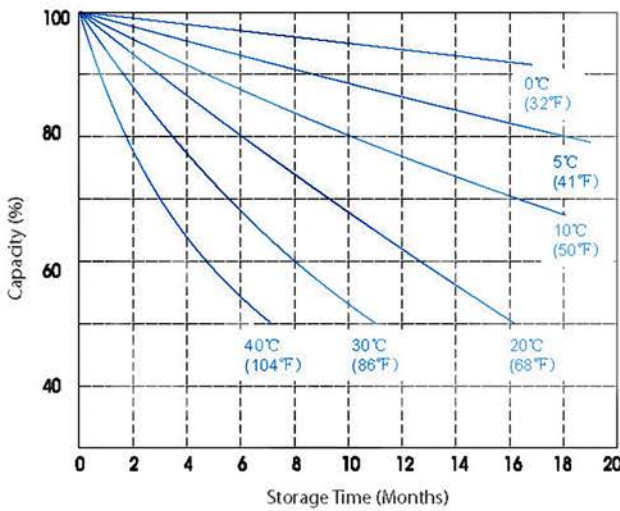
## Cycle service life in relation to depth of discharge



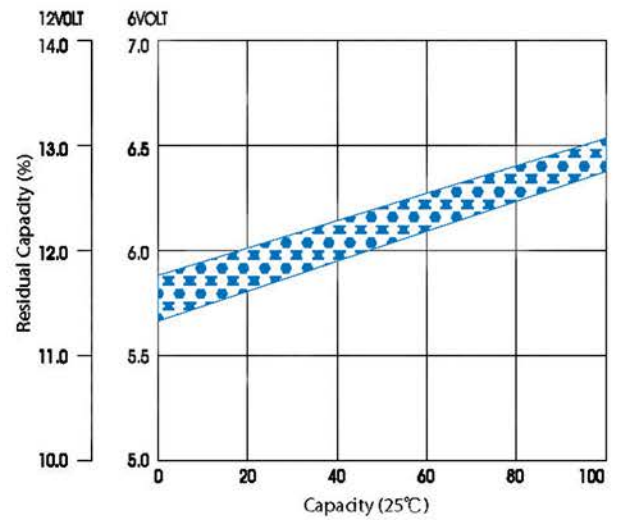
## Constant voltage charge characteristic



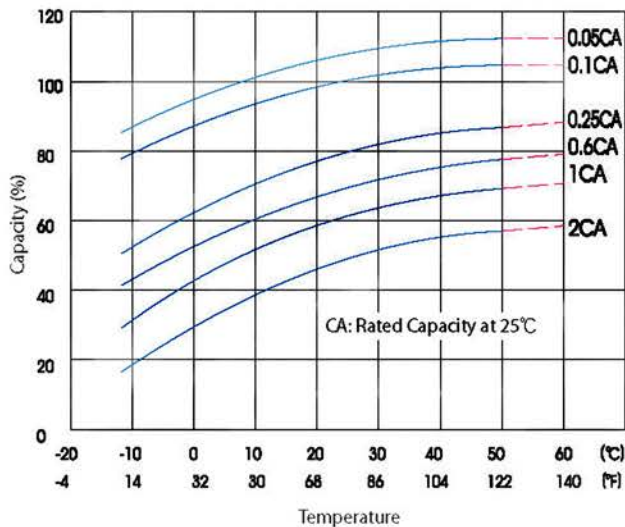
## Self-Discharge Characteristics



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



## Temperature effects on capacity



## Temperature effects float life

