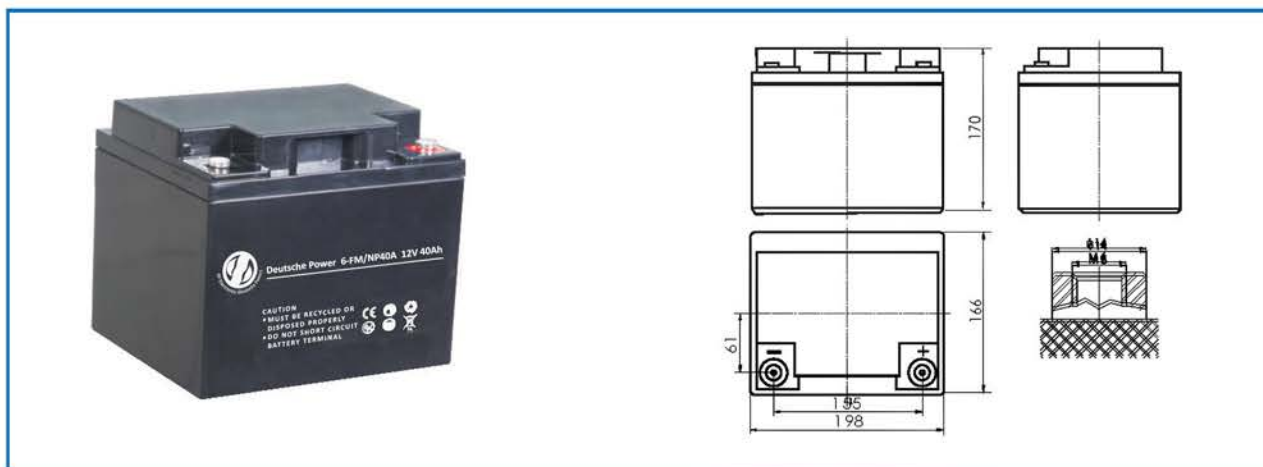


6-FM/NP40A

FM/NP Battery Series (General Use Battery)



Specifications

Nominal Voltage		12V
Rated Capacity(20 hour rate)		40Ah
Dimensions	Total Height (with terminals)	6.70inches (170mm)
	Height	6.70inches (170mm)
	Length	7.80inches (198mm)
	Width	6.54inches (166mm)
Weight		Approx. 30.18pound(13.7kg)

Characteristics

Capacity 77°F(25°C)		40.0Ah
		36.0Ah
		32.0Ah
		24.0Ah
		16.5Ah
Internal Resistance	Full charged Battery 77°F(25°C)	7mΩ
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)	400A(5S)	
Terminal	M1	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 12.0A
		Voltage 14.4~14.7V/77°F(25°C)
	Float	Voltage 13.5~13.8V/77°F(25°C)

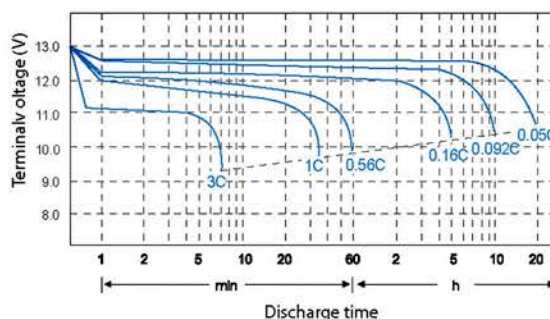
Constant Current Discharge (AMPERES @25°C)

F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.65	81.7	64.0	40.3	30.2	23.5	14.1	10.3	6.81	4.53	4.06	3.24	1.86
1.70	77.0	60.3	38.1	28.3	22.5	13.7	10.0	6.54	4.36	3.91	3.11	1.78
1.80	64.4	51.5	35.1	26.1	21.8	13.2	9.51	6.23	4.08	3.68	2.92	1.68

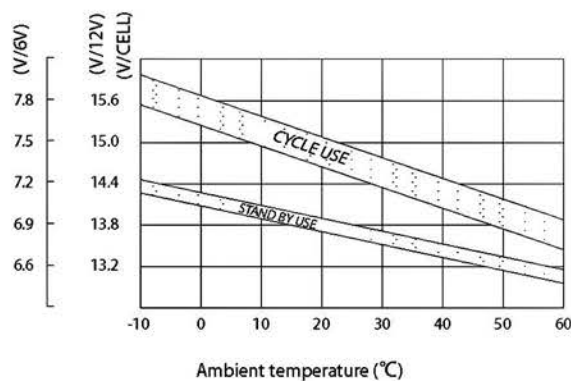
Constant Power Discharge (WATTS PER CELL@25°C)

F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.60	150	119	73.9	55.5	46.9	26.6	18.9	12.7	8.42	7.12	6.09	3.07
1.65	146	116	73.4	55.0	45.5	25.8	18.7	12.5	8.36	7.05	6.00	3.05
1.67	144	114	72.4	54.0	44.8	25.7	18.6	12.4	8.27	6.97	5.94	3.02
1.70	142	112	71.2	53.1	44.1	25.5	18.4	12.2	8.16	6.91	5.86	2.96
1.75	134	107	70.9	52.2	43.8	25.3	18.3	12.1	8.08	6.84	5.71	2.91
1.80	123	99.0	67.5	50.3	43.0	24.8	17.9	11.9	7.81	6.61	5.60	2.82
1.85	102	87.0	61.4	47.8	40.0	23.9	17.4	11.3	7.59	6.32	5.39	2.74

Discharge Curves 77°F(25°C)



Relationship between charge voltage and temperature

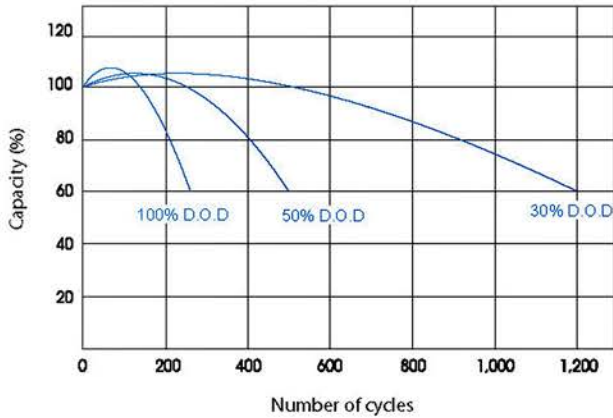


6-FM/NP40A

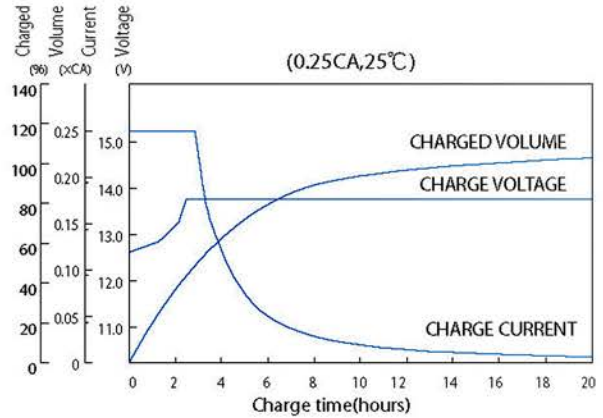
FM/NP Battery Series (General Use Battery)

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.

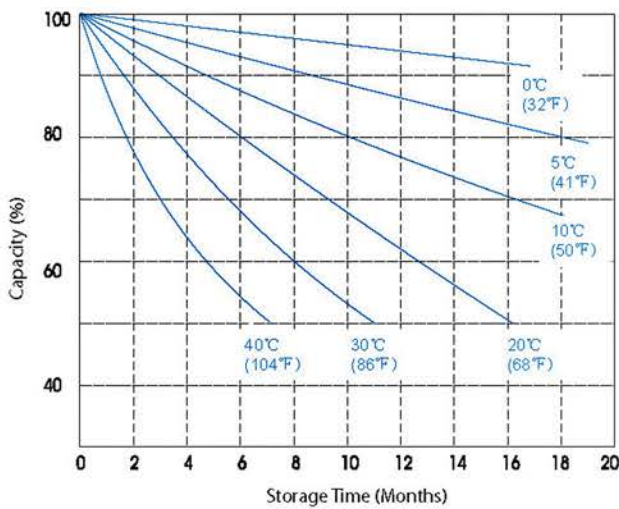
Cycle service life in relation to depth of discharge



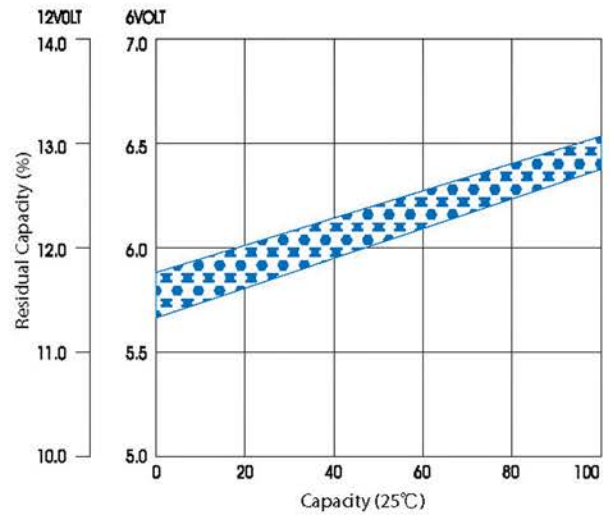
Constant voltage charge characteristic



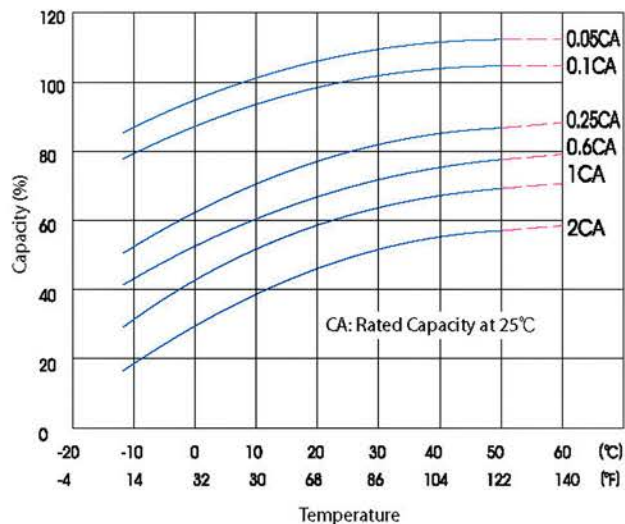
Self-Discharge Characteristics



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



Temperature effects on capacity



Temperature effects float life

