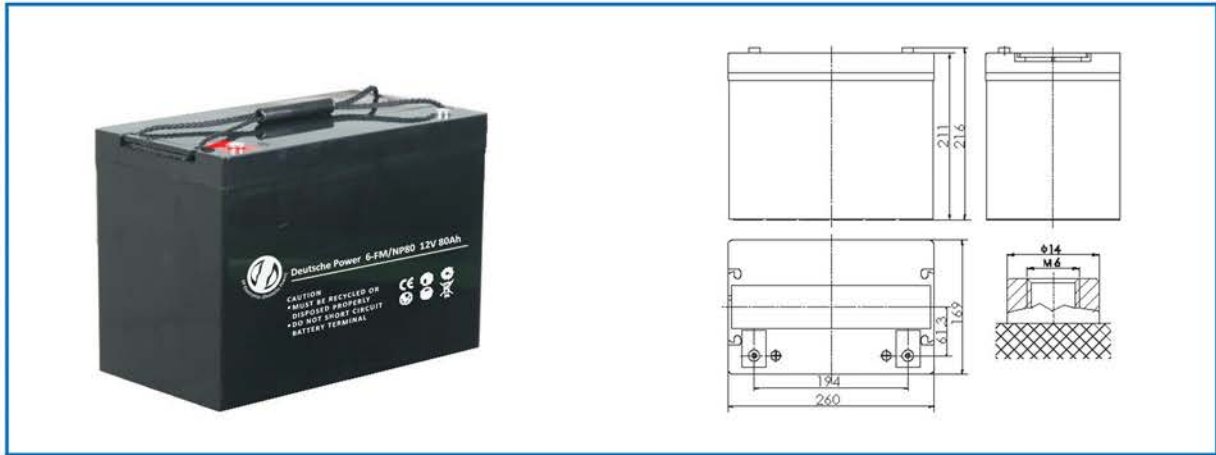


6-FM/NP80

FM/NP Battery Series (General Use Battery)



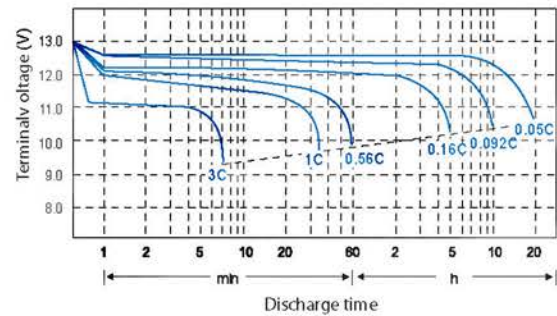
Specifications

Nominal Voltage		12V
Rated Capacity(20 hour rate)		80Ah
Dimensions	Total Height (with terminals)	8.51inches (216mm)
	Height	8.31inches (211mm)
	Length	10.24inches(260mm)
	Width	6.65inches (169mm)
Weight		Approx. 49.50pound(22.5kg)

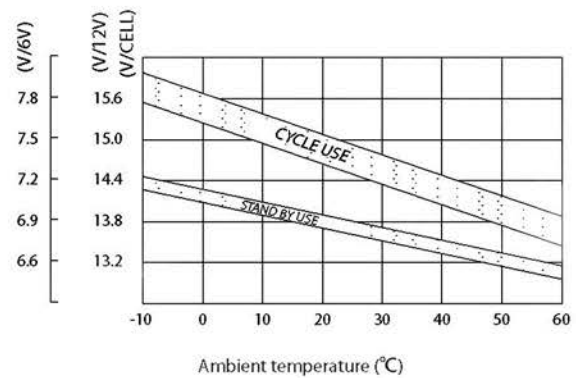
Characteristics

Capacity 77°F(25°C)	20 hourrate (4.0A)	80Ah
	10 hourrate (7.2A)	72Ah
	5 hourrate (12.8A)	64Ah
	1 hourrate (48A)	48Ah
	15 minute Rate (130A)	32.5Ah
Internal Resistance	Full charged Battery 77°F(25°C)	7.5mΩ
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(28°C)	680A(5S)	
Terminal	M1	
Charge (Constant Voltage)	Cycle	Initial Charging Current less than 24A 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	173.6	134.4	81.6	64.1	43.36	30.24	20.88	14.00	9.92	7.84	6.73	3.46
1.70	164.0	125.6	69.4	60.6	41.52	29.52	20.00	13.52	9.52	7.67	6.53	3.40
1.80	138.4	109.6	62.7	57.2	39.52	28.24	18.88	12.80	8.96	7.36	6.34	3.34

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

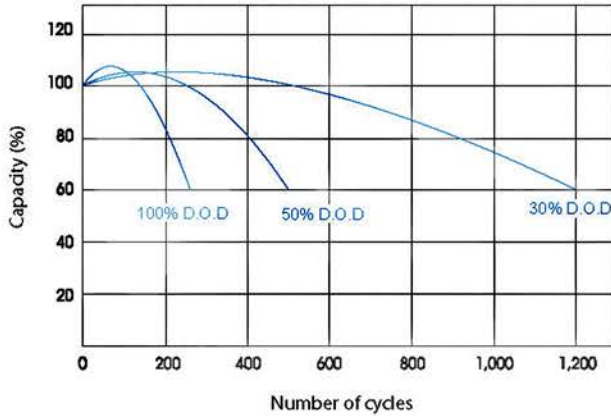
F.V/Time	10Min	15Min	30Min	45Min	1Hour	2Hour	3Hour	5Hour	8Hour	10Hour	12Hour	24Hour
1.60	313	239	157	117	95.0	55.8	39.1	25.7	17.5	14.5	12.6	6.58
1.65	309	237	153	116	94.1	55.0	38.7	25.5	17.4	14.3	12.5	6.56
1.67	307	234	151	114	92.8	54.4	38.6	25.4	17.3	14.2	12.4	6.54
1.70	303	230	149	113	92.3	53.7	38.4	25.0	17.1	13.9	12.4	6.51
1.75	283	224	137	111	92.1	53.0	37.9	24.7	17.0	13.8	12.4	6.49
1.80	263	209	128	110	91.5	52.2	37.0	24.6	16.6	13.5	11.8	6.46
1.85	218	183	118	101	85.1	51.0	36.6	23.5	16.0	13.4	11.6	6.09

6-FM/NP80

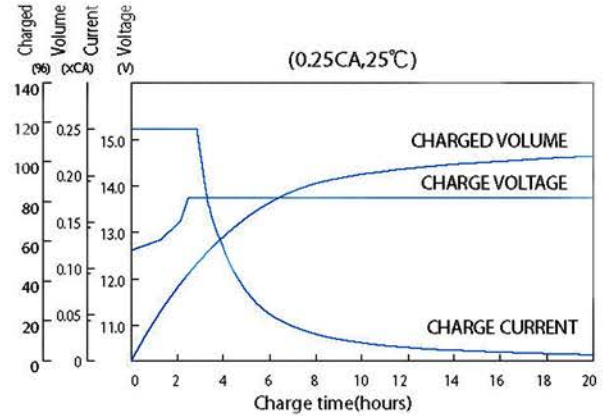
FM/NP Battery Series (General Use Battery)

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.

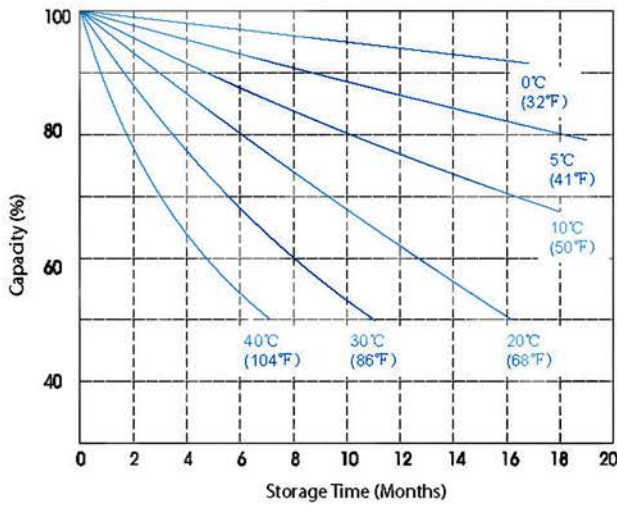
Cycle service life in relation to depth of discharge



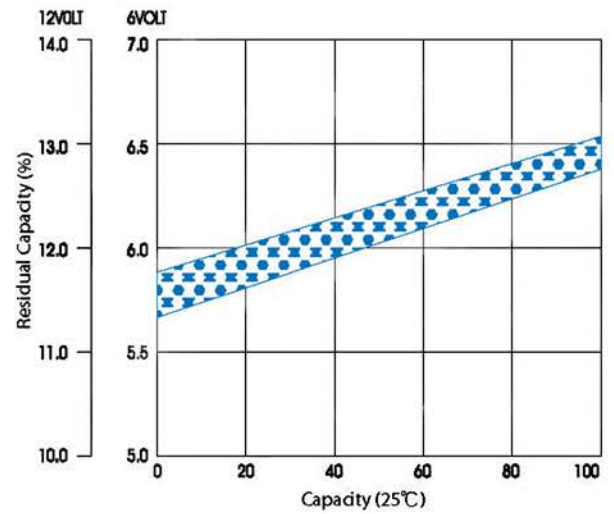
Constant voltage charge characteristic



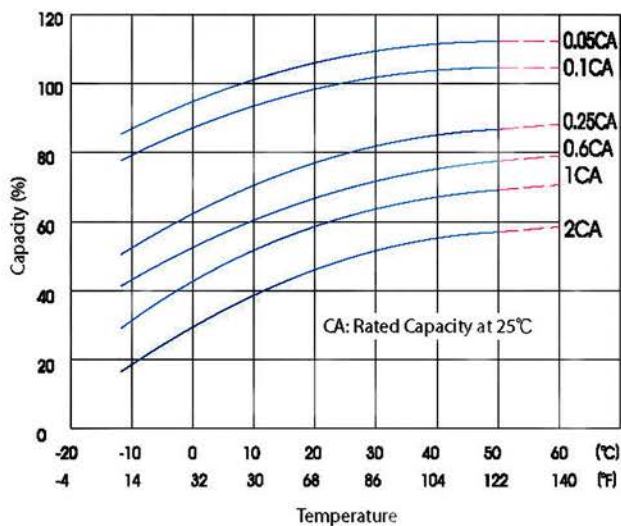
Self-Discharge Characteristics



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



Temperature effects on capacity



Temperature effects float life

