

甸七TM
DIANQI

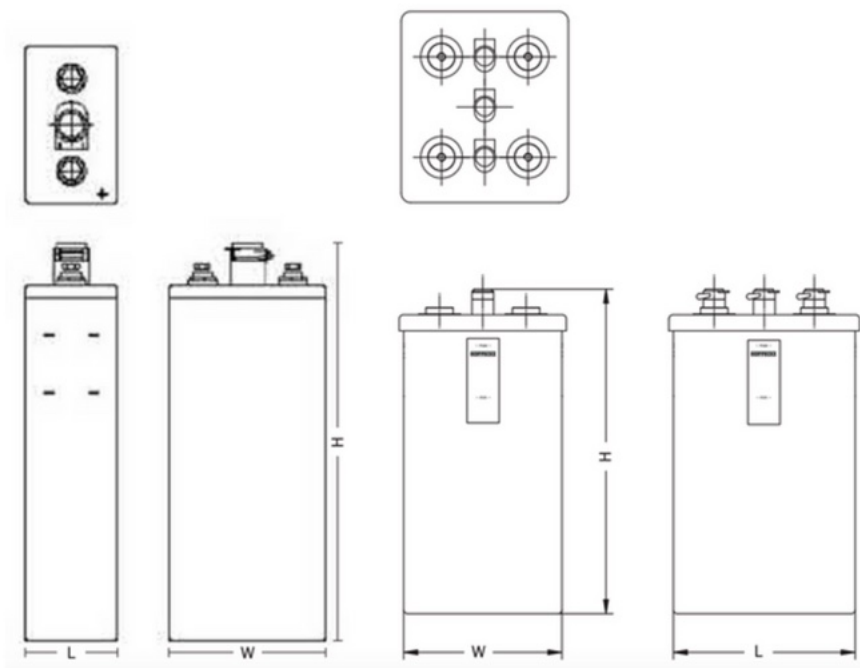


Advanced Battery Technology for High Demands

www.dianqipower.com

TECHNICAL SPECIFICATIONS

Model	Capacity (Ah)	Length (mm)	Width (mm)	Height (mm)	Weight with electrolyte (kg)	Weight without electrolyte (kg)	Filling capacity (L)
DQ-FNC 20 M	20	30	122	309	1.5	1	0.42
DQ-FNC 40 M	40	47	122	309	2.6	1.6	0.84
DQ-FNC 60 M	60	47	122	309	2.8	2.15	0.55
DQ-FNC 80 M	80	72	122	309	3.95	2.7	1.05
DQ-FNC 100 M	100	72	122	309	4.15	3.1	0.88
DQ-FNC 120 M	120	92	122	309	5.35	3.65	1.43
DQ-FNC 140 M	140	92	122	309	5.6	4.15	1.22
DQ-FNC 160 M	160	115	122	309	6.65	4.75	1.6
DQ-FNC 180 M	180	115	122	309	6.9	5.2	1.43
DQ-FNC 200 M	200	92	194	309	8.7	6.25	2.06
DQ-FNC 235 M	235	92	194	309	8.85	6.75	1.76
DQ-FNC 265 M	265	115	194	309	10.5	8	2.1
DQ-FNC 300 M	300	115	194	309	11.2	8.9	1.93
DQ-FNC 340 M	340	157	158	405	15.05	9.6	4.58
DQ-FNC 375 M	375	157	158	405	15.55	10.4	4.33
DQ-FNC 415 M	415	157	158	405	16.05	11.2	4.08
DQ-FNC 450 M	450	157	158	405	16.55	12	3.82



Product Advantages

- ✓ Service life up to 25 years
- ✓ High current capability
- ✓ No electrolyte replacement needed
- ✓ High cycle life - Over 3,000 cycles
- ✓ Operates from -25°C to +60°C
- ✓ Gradual capacity decrease
- ✓ Complete recycling concept



NOMINAL CAPACITY

The rated capacity of nickel-cadmium batteries is expressed in ampere-hours (Ah), representing the total electrical energy that can be extracted from a fully charged battery. This measurement is standardized at +20°C ambient temperature, using a 5-hour discharge period until the cell voltage reaches 1.0V.

CELL VOLTAGE

Nickel-cadmium batteries operate at a nominal voltage of 1.2V per cell. This value represents the mean voltage maintained throughout the discharge cycle when operating at the standard discharge rate of 0.2 C5.

INTERNAL RESISTANCE AND SHORT CIRCUIT CURRENT

A cell's internal resistance varies based on both its temperature and charge level. This internal resistance determines the potential short circuit current of the battery. When fully charged, an FNC battery can deliver short circuit currents ranging from 10 times (for L-type cells) to 40 times (for X-type cells) its rated capacity measured in amperes.

SELF-DISCHARGE

When left idle without charging, all cells experience gradual self-discharge, a process that accelerates in elevated temperatures. The self-discharge rate is notably higher during the initial weeks of storage but progressively decreases as the storage duration extends.

CONSTRUCTION DETAILS

CELL COMPONENTS:

- ✓ Electrodes: Nickel fibre structure with graphite-free active material
- ✓ Separators: Microporous
- ✓ Container: Translucent polypropylene (easy electrolyte level checking)
- ✓ Terminals: Nickel-plated copper/steel
- ✓ Vent plugs: Hinged lid with re-ignition protection

Primary Uses:

- ✓ Power plants and transformer stations
- ✓ UPS systems (Uninterruptible Power Supply)
- ✓ Telecommunication systems
- ✓ Emergency power supplies
- ✓ Switchboards and control systems
- ✓ Industrial installations



DQ-FNC-200M

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