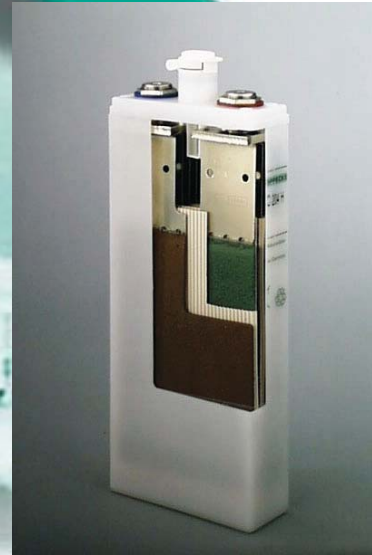
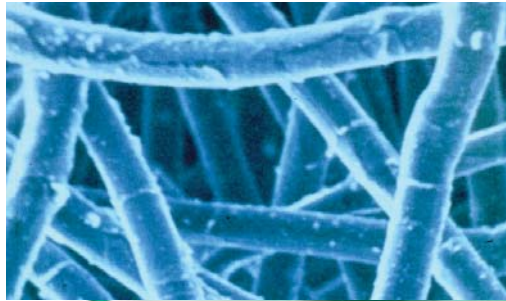




# EXTREME Low Maintenance Fiber Nickel Cadmium Batteries



## FNC EXTREME Low Maintenance Series

Utilizing HOPPECKE Advanced Fiber NICKEL CADMIUM Technology & Patented Catalyst Technology (AquaGen) Designed for :

- UPS
- Switchgear
- Emergency lighting
- Power Generation
- Telecommunications
- Renewable Energy



## EXTREME Low Maintenance Ni-Cd Power

The extremely low maintenance characteristics of the FNC-EXTREME series is developed together with Hoppecke's proven fiber nickel cadmium battery technology and patented recombination catalyst technology to provide superior performance to valve regulated nickel cadmium technologies.

Fiber Nickel Cadmium (FNC) technology provides the best solution for long reliable battery life with minimal maintenance. Designed specifically for UPS, switchgear and other standby applications where the system must be totally reliable with minimum maintenance.

### NO MAINTENANCE:

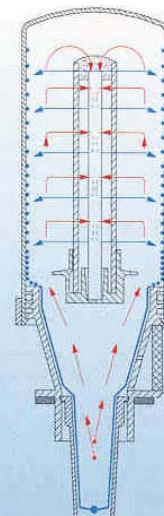
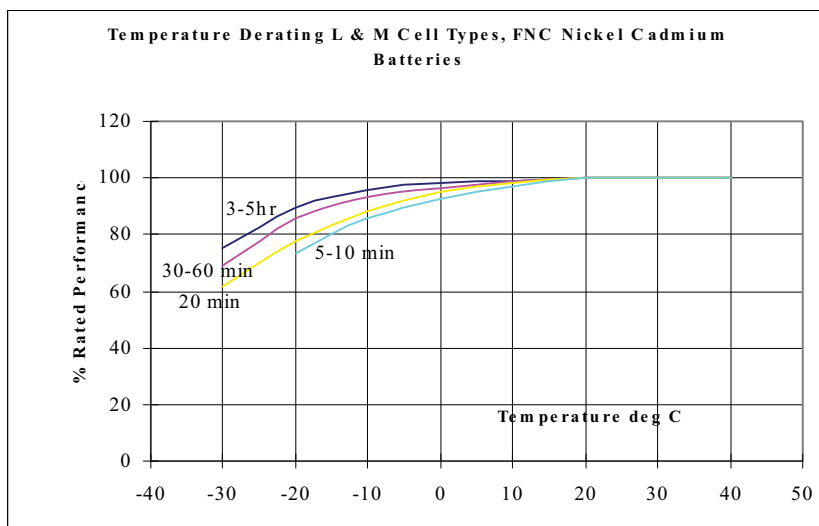
No water addition or filling is required over 20 year service life. The patented AquaGen catalytic vent with its unique flame arresting system controls the loss of water due to normal charging. Therefore, no water addition is required.

The FNC cell design is a standard flooded nickel cadmium cell and therefore has a large electrolyte reserve to protect against dry out in the case of a charger failure.

In addition, the recombination of the oxygen and hydrogen gasses in the AquaGen system is 95% to 98% efficient, a major advantage over Valve Regulated systems, where minimal electrolyte reserve is available. Because of the low gas evolution, no special ventilation of the battery room is required.

### SPECIFICATIONS:

- Operating temperature range: -40C to +60C
- Float Charge: 1.42 to 1.45vpc
- Boost Charge: 1.52 to 1.55vpc
- Water maintenance period @ 1.42vpc: 20 years at 20 C
- Recharge time to 95% available capacity: 7 – 8 hours at normal boost voltage
- No removal of AquaGen vent required for boost charge for added safety.
- Tested and approved by:
  - Det Norske Veritas
  - Lloyds Registry of Shipping
- Cell jar/lid: Translucent Polypropylene
- Jar/Lid seal: welded, leak proof
- Terminals: Nickel plated steel
- Plate construction: Welded nickel plated steel and non-woven fiber plate



Hydrogen and Oxygen gas are recombined at the catalyst surface to water vapor. This water vapor is then deposited on the inside surface of the vent and by gravity is returned to the cell.

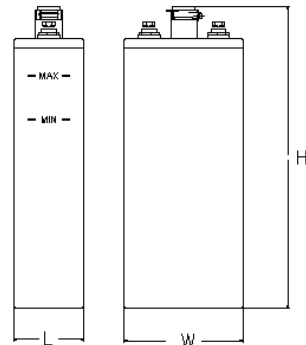
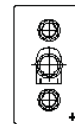
External recombination with HOPPECKE AquaGen®-vent



### FNC Cell Types Available in the EXTREME Low Maintenance Series

Type	C5 Ah	length Inch(mm)	width Inch(mm)	height Inch(mm)	weight Max lbs(kg)
FNC103X	10	1.18(30)	4.80(122)	9.84(250)	3.1(1.38)
FNC106X	19	1.85(47)	4.80(122)	9.84(250)	5.4(2.46)
FNC110X	33	2.83(72)	4.80(122)	9.84(250)	8.3(3.74)
FNC114X	45	3.62(92)	4.80(122)	9.84(250)	18.3(5.04)
FNC118X	58	4.53(115)	4.80(122)	9.84(250)	13.7(6.24)
FNC203X	13	1.18(30)	4.80(122)	12.2(309)	3.96(1.80)
FNC206X	25	1.85(47)	4.80(122)	12.2(309)	6.95(3.16)
FNC210X	43	2.83(72)	4.80(122)	12.2(309)	10.6(4.83)
FNC214X	60	3.62(92)	4.80(122)	12.2(309)	13.9(6.31)
FNC218X	77	4.53(115)	4.80(122)	12.2(309)	17.2(7.84)
FNC201H	12	1.18(30)	4.80(122)	12.2(309)	3.3(1.52)
FNC202H	23	1.18(30)	4.80(122)	12.2(309)	3.9(1.77)
FNC203H	35	1.85(47)	4.80(122)	12.2(309)	5.9(2.68)
FNC204H	46	1.85(47)	4.80(122)	12.2(309)	6.6(3.00)
FNC205H	58	2.83(72)	4.80(122)	12.2(309)	9.2(4.17)
FNC206H	69	2.83(72)	4.80(122)	12.2(309)	9.6(4.36)
FNC207H	80	2.83(72)	4.80(122)	12.2(309)	10.1(4.58)
FNC208H	93	3.62(92)	4.80(122)	12.2(309)	10.1(5.58)
FNC209H	104	3.62(92)	4.80(122)	12.2(309)	12.7(5.78)
FNC210H	115	4.53(115)	4.80(122)	12.2(309)	15.2(6.91)
FNC211H	125	4.53(115)	4.80(122)	12.2(309)	15.9(7.21)
FNC307H	140	3.62(92)	7.64(194)	12.2(309)	18.9(8.58)
FNC308H	160	3.62(92)	7.64(194)	12.2(309)	20.2(9.16)
FNC309H	180	3.62(92)	7.64(194)	12.2(309)	20.3(9.24)
FNC310H	200	4.53(115)	7.64(194)	12.2(309)	24.4(11.1)
FNC311H	220	4.53(115)	7.64(194)	12.2(309)	25.5(11.6)
FNC201L	20	1.18(30)	4.80(122)	12.2(309)	3.5(1.60)
FNC202L	40	1.85(47)	4.80(122)	12.2(309)	5.7(2.59)
FNC203L	60	1.85(47)	4.80(122)	12.2(309)	6.1(2.76)
FNC204L	80	2.83(72)	4.80(122)	12.2(309)	8.9(4.05)
FNC205L	100	2.83(72)	4.80(122)	12.2(309)	9.4(4.28)
FNC206L	120	3.62(92)	4.80(122)	12.2(309)	11.5(5.24)
FNC207L	140	3.62(92)	4.80(122)	12.2(309)	12.3(5.61)
FNC208L	160	4.53(115)	4.80(122)	12.2(309)	15.0(6.83)
FNC209L	180	4.53(115)	4.80(122)	12.2(309)	15.2(6.92)
FNC306L	200	3.62(92)	7.64(194)	12.2(309)	18.6(8.47)
FNC307L	233	3.62(92)	7.64(194)	12.2(309)	20.2(9.17)
FNC308L	266	4.53(115)	7.64(194)	12.2(309)	23.5(10.7)
FNC309L	300	4.53(115)	7.64(194)	12.2(309)	24.0(10.9)
FNC404L	150	3.03(77)	6.18(157)	15.9(405)	16.1(7.33)
FNC405L	185	3.03(77)	6.18(157)	15.9(405)	17.1(7.79)
FNC406L	225	4.29(109)	6.18(157)	15.9(405)	22.7(10.3)
FNC407L	265	4.29(109)	6.18(157)	15.9(405)	24.0(10.9)
FNC408L	300	4.29(109)	6.18(157)	15.9(405)	26.4(12.0)
FNC409L	340	4.29(109)	6.18(157)	15.9(405)	28.8(13.1)
FNC410L	375	6.18(157)	6.18(157)	15.9(405)	33.7(15.3)
FNC411L	415	6.18(157)	6.18(157)	15.9(405)	34.8(15.8)
FNC412L	450	6.18(157)	6.18(157)	15.9(405)	36.3(16.5)
FNC413L	490	6.18(157)	6.18(157)	15.9(405)	37.6(17.1)
FNC414L	525	6.18(157)	6.18(157)	15.9(405)	38.9(17.7)
FNC512L	660	7.93(201.5)	8.2(208.5)	15.9(405)	53.5(24.3)
FNC513L	715	7.93(201.5)	8.2(208.5)	15.9(405)	54.6(24.8)
FNC514L	770	7.93(201.5)	8.2(208.5)	15.9(405)	55.7(25.3)
FNC515L	825	7.93(201.5)	8.2(208.5)	15.9(405)	56.6(25.7)
FNC516L	880	7.93(201.5)	8.2(208.5)	15.9(405)	57.6(26.2)
FNC517L	935	9.37(238)	8.2(208.5)	15.9(405)	65.6(29.8)
FNC518L	990	9.37(238)	8.2(208.5)	15.9(405)	65.1(29.6)
FNC519L	1045	9.37(238)	8.2(208.5)	15.9(405)	66.2(30.1)
FNC520L	1100	9.37(238)	8.2(208.5)	15.9(405)	67.3(30.6)

Type	C5 Ah	length Inch(mm)	width Inch(mm)	height Inch(mm)	weight Max lbs(kg)
FNC201M	20	1.18(30)	4.80(122)	12.2(309)	3.4(1.54)
FNC202M	40	1.85(47)	4.80(122)	12.2(309)	5.7(2.58)
FNC203M	60	1.85(47)	4.80(122)	12.2(309)	6.2(2.84)
FNC204M	80	2.83(72)	4.80(122)	12.2(309)	9.15(4.16)
FNC205M	100	2.83(72)	4.80(122)	12.2(309)	9.8(4.46)
FNC206M	120	3.62(92)	4.80(122)	12.2(309)	12.2(5.56)
FNC207M	140	3.62(92)	4.80(122)	12.2(309)	13.0(5.90)
FNC208M	160	4.53(115)	4.80(122)	12.2(309)	15.6(7.11)
FNC209M	180	4.53(115)	4.80(122)	12.2(309)	16.3(7.41)
FNC306M	200	3.62(92)	7.64(194)	12.2(309)	18.7(8.51)
FNC307M	233	3.62(92)	7.64(194)	12.2(309)	20.3(9.23)
FNC308M	266	4.53(115)	7.64(194)	12.2(309)	22.0(10.0)
FNC309M	300	4.53(115)	7.64(194)	12.2(309)	24.1(10.9)
FNC404M	150	3.03(77)	6.18(157)	15.9(405)	16.5(7.51)
FNC405M	185	3.03(77)	6.18(157)	15.9(405)	17.2(7.81)
FNC406M	225	4.29(109)	6.18(157)	15.9(405)	23.1(10.5)
FNC407M	265	4.29(109)	6.18(157)	15.9(405)	23.1(10.5)
FNC408M	300	4.29(109)	6.18(157)	15.9(405)	26.4(12.0)
FNC409M	340	4.29(109)	6.18(157)	15.9(405)	34.1(15.5)
FNC410M	375	6.18(157)	6.18(157)	15.9(405)	35.2(16.0)
FNC411M	415	6.18(157)	6.18(157)	15.9(405)	35.7(16.2)
FNC412M	450	6.18(157)	6.18(157)	15.9(405)	37.0(16.8)





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