



**VISION Rechargeable Products
Sealed Lead Acid Battery**

www.vision-batt.com

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

General purpose application

VISION FM series are designed for general purpose applications, such as UPS, telecom, electrical utilities.

With 10 years design life, the batteries comply to the most popular international standards, such as IEC896-2, BS6290-4, Eurobat Guide.

The battery container and cover are available both in V0 class flame retardant ABS or HBO ABS plastics.

Shenzhen Center Power Tech Co., Ltd. has come to obtain wide recognition from customers all over the world. This is not only due to the fact that our products are featured by reliable stability in quality, but also because we attach great importance to our communication with customers and our perfect understanding of customers' requirements as well.

Shenzhen Center Power Tech. Co., Ltd

6FM28-X 12V 28Ah

General Features

- Positive and negative plates in lead-calcium-tin alloy
- Stable Quality & High Reliability
- Sealed Construction
- Long Service Life
- Maintenance-Free Operation
- Low Pressure Venting System
- Low Self Discharge
- U. L. Component Recognition
- Six months shelf life at 20°C
- Design life 10 years



Dimensions and Weight

	<i>SI Units</i>	<i>English Units</i>
Length	165mm	6.54 inch
Width	125 mm	4.92 inch
Height	175 mm	6.89 inch
Total Height	175 mm	6.89 inch
Approx. Weight	9.60Kg	21.2lbs

Performance Characteristics

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 68°F(20°C)
10 min wattage @1.6V155W/cell
20 hour rate (1.40A, 10.5V) 28.0Ah
10 hour rate (2.70A, 10.8V) 27.0Ah
- Internal Resistance
Fully Charged battery 68°F(20°C) 12 mOhms
- Self-Discharge
3% of capacity declined per month at 20°C(average)
- Operating Temperature Range
Discharge -20~60°C
Charge -10~60°C
Storage -20~60°C
- Max. Discharge Current 68°F(20°C) 310A(5s)
- Short Circuit Current 850A
- Charge Methods: Constant Voltage Charge 68°F(20°C)
C cle use 14.4-14.7V
Maximum charging current 7.2A
Temperature compensation -30mV/°C
- Standby use 13.6-13.8V
Temperature compensation -20mV/°C

Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

Discharge Data

Constant Current Discharge Data (Amperes at 25°C)																									
End Voltage Per cell / V	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	125	87.5	67.3	54.5	46.8	41.7	36.5	32.6	29.6	27.2	25.2	23.5	16.4	12.9	10.7	9.30	7.20	5.94	4.99	4.31	3.81	3.41	3.10	2.64	1.35
1.65	117	82.7	63.8	51.7	44.4	39.6	34.7	31.0	28.1	25.9	24.0	22.4	15.7	12.3	10.3	8.90	6.90	5.70	4.79	4.14	3.66	3.28	2.98	2.54	1.31
1.70	110	78.0	60.3	48.9	42.0	37.4	32.8	29.4	26.7	24.6	22.8	21.4	14.9	11.7	9.80	8.51	6.60	5.46	4.59	3.97	3.51	3.15	2.86	2.45	1.25
1.75	103	73.2	56.8	46.1	39.6	35.3	31.0	27.8	25.3	23.3	21.6	20.3	14.2	11.2	9.32	8.11	6.30	5.21	4.39	3.80	3.36	3.02	2.74	2.35	1.19
1.80	98.2	70.5	54.8	44.6	38.5	34.4	30.2	27.1	24.7	22.7	21.1	19.8	13.9	10.9	9.14	7.95	6.18	5.12	4.31	3.74	3.31	2.97	2.70	2.32	1.17

Constant Power Discharge Data (Watts per cell at 25°C)																									
End Voltage Per cell / V	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	229	155	118	95.3	81.7	72.6	64.6	58.6	53.9	49.7	46.3	43.5	30.5	24.1	20.2	17.6	13.7	11.4	9.64	8.39	7.45	6.72	6.13	5.26	2.75
1.65	219	149	114	92.1	79.0	70.3	62.6	56.8	52.3	48.3	45.0	42.3	29.7	23.4	19.7	17.2	13.4	11.2	9.44	8.21	7.29	6.58	6.01	5.17	2.71
1.70	210	144	110	89.0	76.3	67.9	60.5	55.0	50.7	46.8	43.7	41.1	28.9	22.8	19.1	16.7	13.1	10.9	9.23	8.03	7.14	6.44	5.89	5.08	2.66
1.75	200	138	106	85.8	73.6	65.6	58.5	53.2	49.0	45.4	42.4	39.9	28.1	22.2	18.6	16.3	12.8	10.7	9.02	7.86	6.99	6.31	5.76	4.98	2.62
1.80	190	132	102	82.6	71.0	63.2	56.4	51.4	47.4	43.9	41.1	38.7	27.3	21.5	18.1	15.8	12.4	10.4	8.81	7.68	6.83	6.17	5.64	4.89	2.57

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

