

FZA 225-12

12V 225AH

General



FZA 225-12 / VRLA GEL



Physical Specification

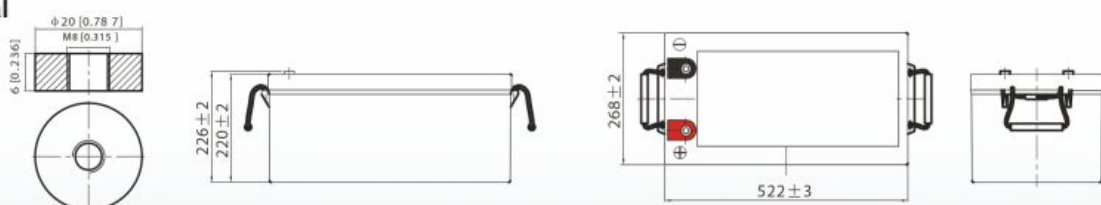
Part Number:	FZA 225-12
Length:	522 ± 2 mm (20.55 inches)
Width:	268 ± 2 mm (10.55 inches)
Container Height:	220 ± 2 mm (8.66 inches)
Total Height (with terminal):	226 ± 2 mm (8.90 inches)

Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	225 AH
Terminal Type	Standard Terminal	F11
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	260.0 AH/13.0A	(20hr,1.80V/cell, 25°C / 77°F)
	250.0 AH/25.0A	(10hr,1.80V/cell, 25°C / 77°F)
	215.4 AH/43.0A	(5hr,1.75V/cell, 25°C / 77°F)
	195.2 AH/65.05A	(3hr,1.75V/cell, 25°C / 77°F)
Max Discharge Current	2500A (5s)	
Internal Resistance	Approx 2.5mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (5 ~ 104°F)
		Storage: -15 ~ 40°C (5 ~ 104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 75.0A.Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Design Floating Life at 20°C	10 Years	

Dimensions

F11 Terminal



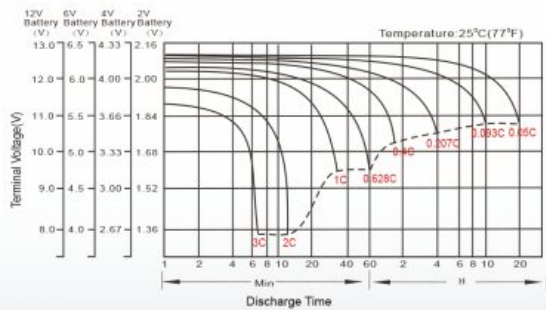
Constant Current Discharge (Amperes) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	427.9	336.4	286.1	239.3	190.2	143.9	117.9	75.1	59.4	48.5	39.1	34.0	27.6	23.6	12.88
1.80V/cell	/	429.8	345.7	282.9	224.4	167.4	132.0	81.9	63.9	51.8	42.0	36.5	29.3	25.0	13.00
1.75V/cell	/	472.3	377.6	304.3	233.0	173.7	138.1	85.0	65.1	52.9	43.0	37.5	29.8	25.3	13.13
1.70V/cell	/	/	403.1	319.8	242.5	180.7	142.5	88.4	66.9	54.3	44.2	38.3	30.2	25.5	13.38
1.65V/cell	/	/	428.6	339.7	255.8	185.2	147.3	90.8	69.7	56.2	45.4	39.1	30.7	26.0	13.55
1.60V/cell	/	/	458.4	361.9	270.1	193.0	152.5	93.9	71.9	58.0	46.9	40.0	31.0	26.3	13.63

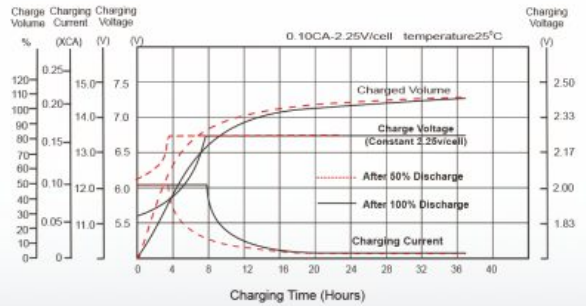
Constant Power Discharge (Watts) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	782.3	621.4	533.8	451.0	362.5	276.7	227.3	145.8	115.7	94.8	76.6	66.9	54.5	46.7	25.5
1.80V/cell	/	784.6	636.3	525.3	421.2	319.3	253.3	158.0	123.8	100.7	81.9	71.5	57.7	49.4	25.7
1.75V/cell	/	848.3	686.5	559.7	433.6	328.2	263.8	163.3	125.6	102.6	83.8	73.2	58.5	49.8	25.9
1.70V/cell	/	/	722.7	583.8	448.8	340.0	271.2	169.4	128.9	105.1	85.7	74.6	59.3	50.3	26.4
1.65V/cell	/	/	762.6	615.6	469.6	345.4	278.3	173.2	133.7	108.3	87.8	76.0	60.1	51.2	26.7
1.60V/cell	/	/	802.1	648.6	492.3	358.0	286.7	178.1	137.2	111.3	90.4	77.4	60.5	51.7	26.8

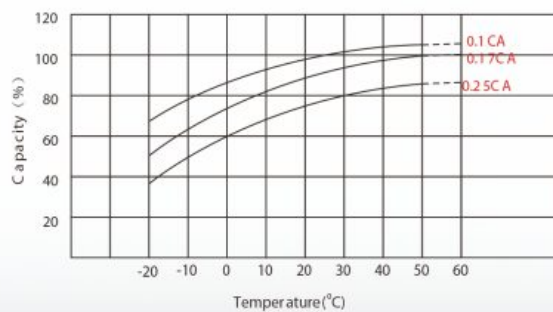
Discharge Characteristics



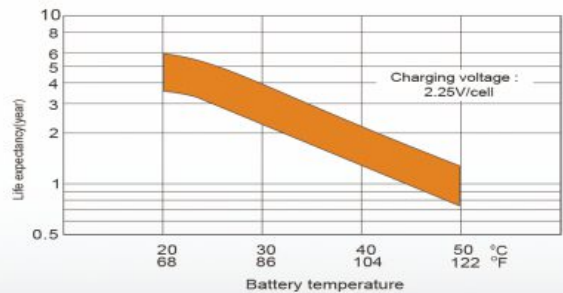
Float Charging Characteristics



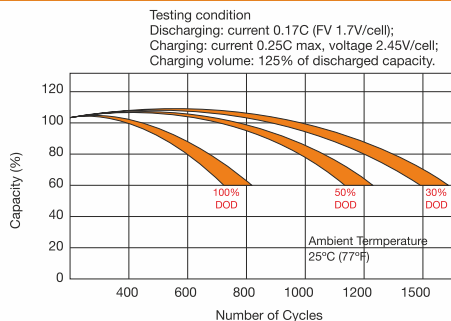
Temperature Effects in Relation to Battery Capacity



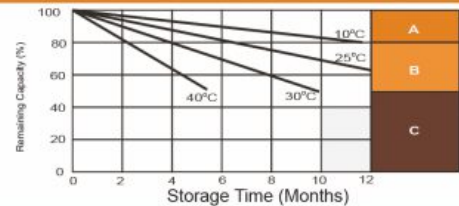
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary required
(Carryout supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.25V/cell.
3. Charged for 8 ~ 10 hours at limited current 0.05 CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.