

FZA 210-12

12V 210AH

General



FZA 210-12 / VRLA GEL



Physical Specification

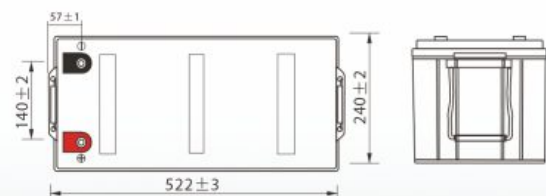
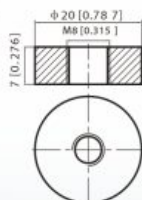
Part Number:	FZA 210-12
Length:	522 ± 2 mm (20.55 inches)
Width:	240 ± 2 mm (9.45 inches)
Container Height:	218 ± 2 mm (8.58 inches)
Total Height (with terminal):	224 ± 2 mm (8.81 inches)

Specifications

Terminal Type	Nominal Voltage	12V
	Nominal Capacity (10HR)	210 AH
	Standard Terminal	F11
Container Material	Optional Terminal	-
	Standard Option	ABS
Rated Capacity	Flame Retardant Option (FR)	ABS (UL94:VO)
	208.0 AH/10.4A	(20hr, 1.80V/cell, 25°C / 77°F)
	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C / 77°F)
	172.5 AH/34.5A	(5hr, 1.75V/cell, 25°C / 77°F)
Max Discharge Current	156.0 AH/52.0A	(3hr, 1.75V/cell, 25°C / 77°F)
	2000A (5s)	
Internal Resistance	Approx 2.7mΩ	
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 60.0A. 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



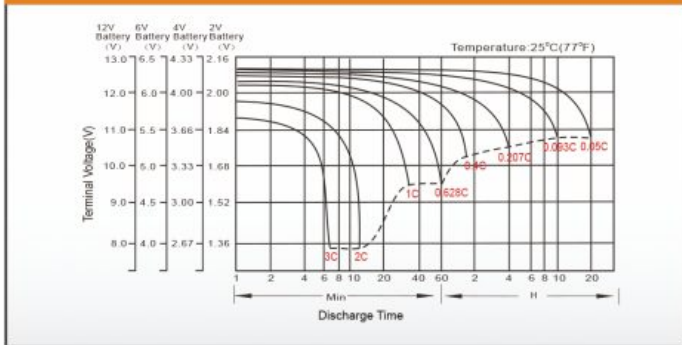
Constant Current Discharge (Amperes) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	342.3	278.4	240.0	204.6	154.8	115.1	94.3	60.1	46.2	37.6	31.3	27.2	22.1	18.9	10.3
1.80V/cell	459.5	343.9	282.4	235.8	179.5	133.9	105.6	65.5	50.6	40.6	33.6	29.2	23.4	20.0	10.4
1.75V/cell	\	377.8	302.0	250.2	189.2	139.0	110.5	68.0	52.0	41.7	34.5	30.0	23.8	20.2	10.5
1.70V/cell	\	411.8	322.5	264.0	196.4	144.5	114.0	70.7	53.5	42.7	35.3	30.6	24.2	20.4	10.7
1.65V/cell	\	444.4	342.9	281.4	204.6	148.1	117.8	72.7	55.8	44.2	36.3	31.3	24.7	20.8	10.8
1.60V/cell	\	476.4	366.7	297.6	216.0	154.4	122.0	75.1	57.5	45.5	37.3	32.0	25.1	21.0	10.9

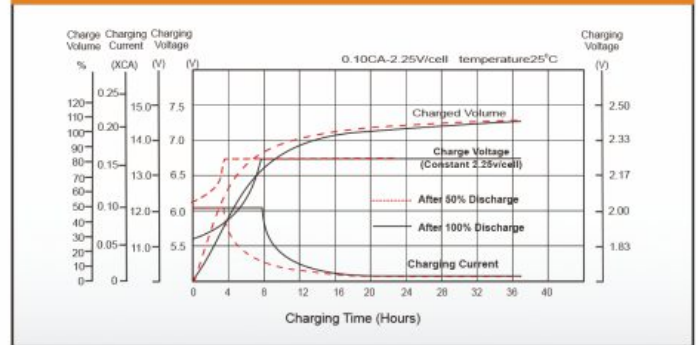
Constant Power Discharge (Watts) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	625.9	514.3	447.8	385.7	295.0	221.3	181.9	116.6	90.1	73.4	61.3	53.5	43.6	37.4	20.4
1.80V/cell	831.2	627.7	519.9	438.0	336.9	255.4	202.6	126.4	98.1	78.9	65.5	57.2	46.1	39.5	20.6
1.75V/cell	\	678.7	549.2	460.2	352.2	262.5	211.0	130.6	100.5	80.7	67.2	58.6	46.8	39.9	20.7
1.70V/cell	\	723.0	578.2	482.0	363.5	272.0	217.0	135.6	103.1	82.6	68.6	59.7	47.4	40.2	21.1
1.65V/cell	\	773.1	610.1	509.9	375.7	276.3	222.7	138.5	107.0	85.1	70.2	60.8	48.4	41.0	21.4
1.60V/cell	\	809.8	641.7	533.4	393.8	286.4	229.4	142.5	109.8	87.3	72.0	61.9	49.0	41.4	21.5

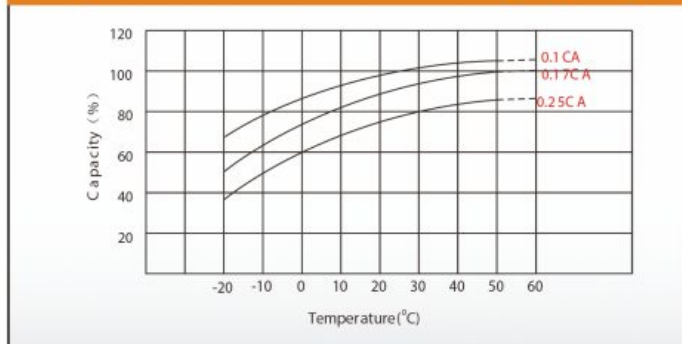
Discharge Characteristics



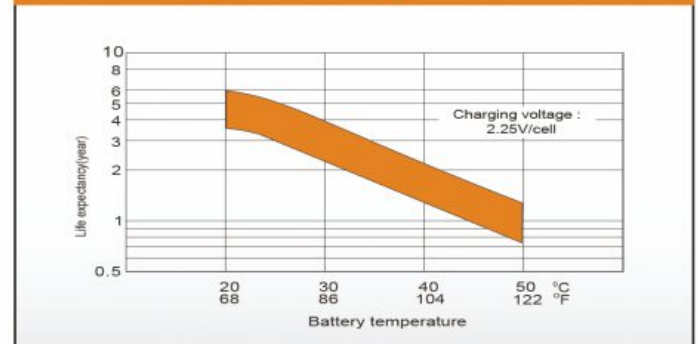
Float Charging Characteristics



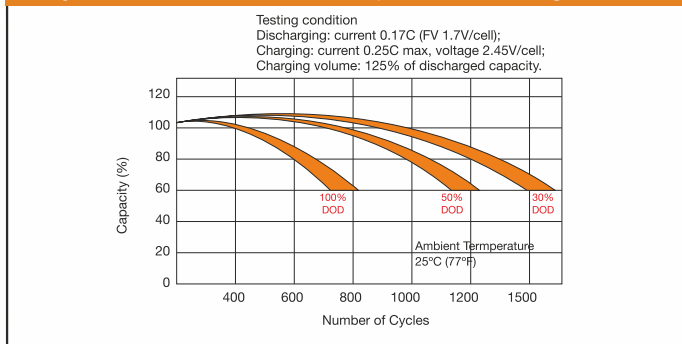
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

