

EP RANGE

General Applications

Battery Type	Nominal Voltage (V)	Rated Capacity (Ah) at 27°C.						Dimensions (mm)			Weight (kg) (+/-5%)	Energy Density (Wh/l)	Specific Energy (Wh/kg) Charged condition	Internal Resistance (m-ohm) Max at fully (5 secs)	Max Discharge Current (Amps)	Container/Lid Material	Layout	Terminal	
		20 hr 1.75 V/cell	10 hr 1.75 V/cell	3hr 1.7 V/cell	1.5 hr 1.7 V/cell	1 hr 1.6 V/cell	30 mins 1.6 V/cell	Overall Height ±2	Height up to lid top ±2	Length ±1									Width ±1
EP 7-12	12	7	6.5	5.2	5.0	4.2	3.5	100	94	151	65	2.22	91	31	22	105	ABS	b	F ₂
EP 9-12/ EP 1234 W	12	9	8.1	6.8	6.4	5.4	4.5	100	94	151	65	2.39	117	42	18	135	ABS	b	F ₂
EP 12-12	12	12	11.2	9.0	8.6	7.2	6.0	100	94	151	98	3.20	103	35	16	180	ABS	c	F ₂
EP 17-12	12	17	16.0	12.9	12.2	10.2	8.5	167	167	181	76	5.00	88	33	15	255	ABS	d ₂	F ₄
EP 26-12 W	12	26	24.0	19.5	18.7	15.6	13.0	175	175	166	125	8.80	86	35	10	390	PP	e	F ₅
EP 42-12	12	42	38.5	31.5	30.2	25.2	21.0	170	170	197	165	12.60	91	40	8	420	PP	f	F ₆
EP 65-12	12	65	60.0	48.6	46.8	39.0	32.5	174	174	350	166	20.30	77	38	8	500	PP	h	F ₇
EP 75-12	12	75	69.0	56.2	54.0	45.0	37.5	174	174	350	166	21.05	89	40	8	500	PP	h	F ₇
EP 100-12	12	100	91.0	75.0	72.0	60.0	50.0	235	235	407	173	32.80	72	36	6	600	PP	h	F ₈
EP 120-12	12	120	109.0	90.0	86.4	72.0	60.0	235	235	407	173	35.65	87	40	6	600	PP	h	F ₈
EP 150-12	12	150	136.5	112.5	108.0	90.0	75.0	240	240	557	172	46.65	78	38	6	900	PP	h	F ₈
EP 200-12	12	200	182.0	150.0	144.0	120.0	100.0	240	240	533	250	62.95	75	37	5	1200	PP	i	F ₉

Table (1)

Advantages : International size – matches dimension of any International equipment.
 High Rate performance – matches or betters High Rate performance of equivalent International types.

EP Series

BATTERY CHARGING FOR EP SERIES



CHARGER

'Constant Potential' chargers, with current limit facility only, are recommended for normal continuous operation.

CHARGE LIMITS

Table (2) shows the charge voltage and limit current. The charge voltage of the battery has to be reduced with increasing temperature and increased with decreasing temperature. Accordingly, charging with a given voltage requires increased charge current when the temperature is high and reduced charge current at a lower temperature.

a) Even under high temperature, a charging voltage of 2.2V/cell is required.

b) Even under low temperature, the charging voltage must be set at less than 2.45V/cell so as to prevent gas generation from the battery.

c) The battery life will be shortened as service temperature rises.



CHARGE PARAMETERS

Recharge Voltages: Batteries to be recharged in CC-CV mode only.

Mode of Operation	Voltage settings per 12V unit for ambient temperature 20–30 deg C	Current Setting
Float	13.7V +/- 0.1V	Maximum: 0.3CA
Cyclic	14.7V +/- 0.1V	Minimum: 0.1CA
Temperature Compensation : (Reference 25 deg C) FLOAT : -18 mV / deg C / 12V unit CYCLIC : -30 mV / deg C / 12V unit		

Table (2)

EP Series

CHARGE CHARACTERISTICS

Charge under constant potential charging mode at 27°C

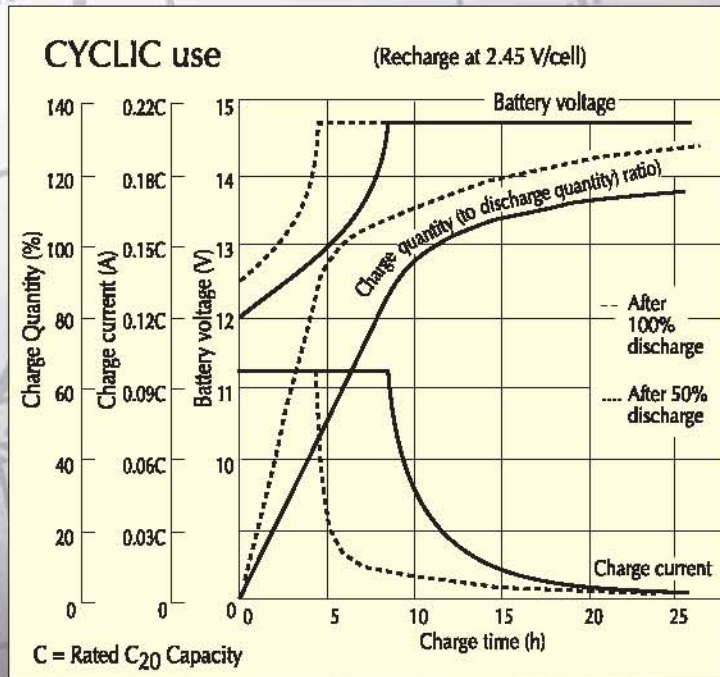


Figure (3)

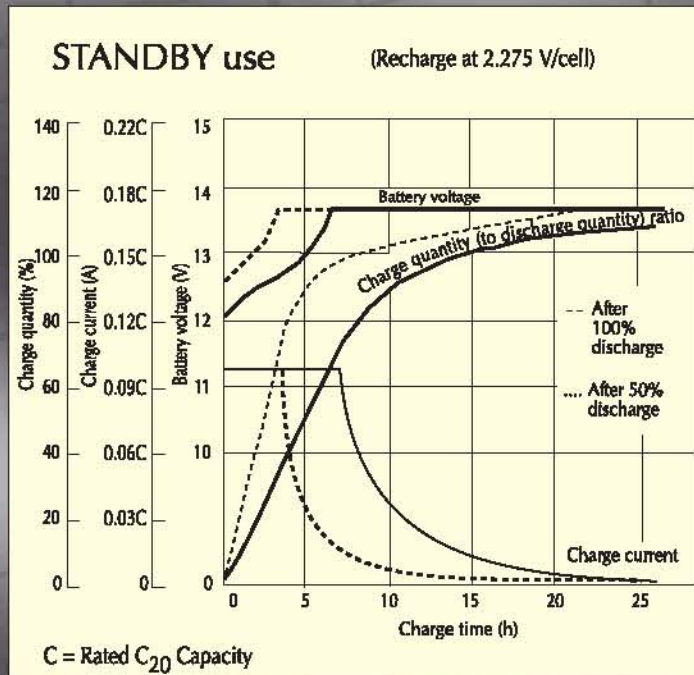


Figure (4)

SERVICE LIFE

The trend of service life of EP batteries under different operating conditions

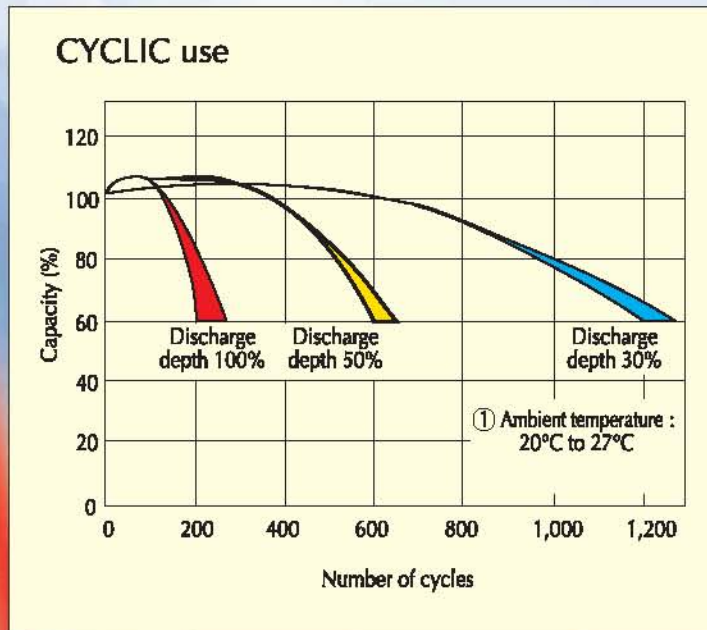


Figure (5)

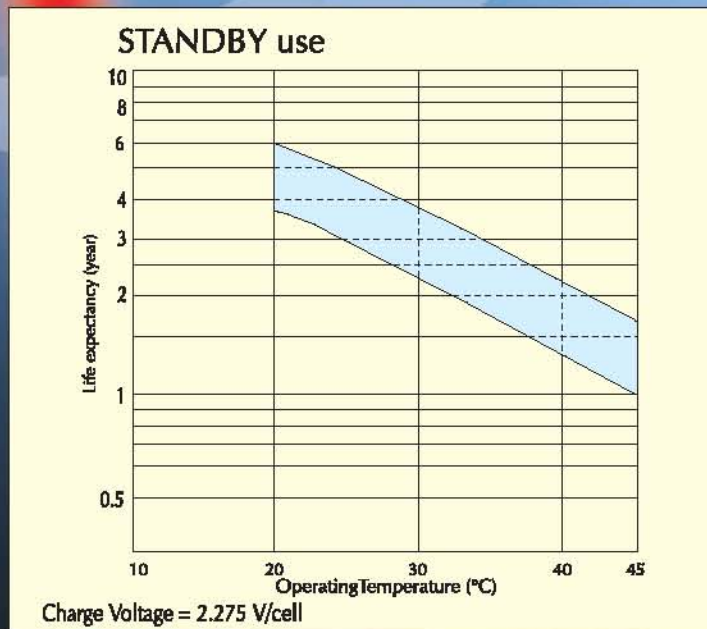


Figure (6)