

POWER - PLUS

DC POWER SYSTEM



Nickel-Cadmium M-Range Battery

Type : KM-P

Medium discharge mode

Nickel-cadmium batteries of this range type are constructed for the purposes where it is usually necessary to maintain current consumption from 30 minutes to 3 hours and /or for hybrid consumption where a combination of high and low discharge mode is required

Application :-

- UPS System DC & AC, Emergency Lighting
- Security Alarm and Signaling System
- Telecommunication equipment
- Photovoltaic / Solar, Navigation Aids
- Brake systems (Train)

DIMENSIONS OF SERIES KPM-P CELLS

Type of cell		Capacity	Size (mm)			Version	Weight (Kg)		Pole Terminal
			Ah	L	W		H	Without electrolyte	
KM	11 P	11	46	85	187	A1	0.71	1.03	2 x M10
KM	18 P	18	46	85	257	A1	0.92	1.41	2 x M10
KM	24 P	24	46	85	257	A1	1.12	1.51	2 x M10
KM	30 P	30	46	85	257	A1	1.27	1.64	2 x M10
KM	40 P	40	85	85	257	A1	1.8	2.68	2 x M10
KM	45 P	45	85	85	257	A1	1.8	2.68	2 x M10
KM	55 P	55	85	85	257	A1	2.05	2.82	2 x M10
KM	60 P	60	85	85	257	A1	2.30	2.97	2 x M10
KM	65 P	65	53	134	400	A1	2.3	2.97	2 x M20
KM	75 P	75	53	134	400	A1	3.91	5.98	2 x M20
KM	90 P	90	69	134	400	A1	4.39	6.21	2 x M20
KM	110 P	110	69	134	400	A1	4.97	6.54	2 x M20
KM	125 P	125	70	164	402	A1	5.77	7.83	2 x M20
KM	140 P	140	70	164	402	A1	6.20	8.00	2 x M20
KM	160 P	160	108	164	400	A1	6.95	10.64	2 x M20
KM	185 P	185	108	164	400	A1	7.53	10.94	2 x M20
KM	205 P	205	108	164	400	A1	8.3	11.20	2 x M20
KM	225 P	225	108	164	400	A1	9.90	12.70	4 x M20
KM	250 P	250	108	164	400	A1	9.78	12.38	4 x M20
KM	270 P	270	164	158	402	A1	11.20	13.40	4 x M20
KM	310 P	310	164	158	402	A1	13.40	18.20	4 x M20
KM	355 P	355	164	158	402	A1	14.90	19.20	4 x M20
KM	400 P	400	164	158	402	A1	16.30	20.10	4 x M20

Discharge current of fully charged cells at 20 °C

Final voltage: 1.15 V/cell

Type of cell		C5 Ah	Minutes				Hours				
			5	10	20	30	1	1.5	2	3	5
KM	11 P	11	8.00	7.40	6.60	6.20	5.10	4.29	3.70	2.86	2.20
KM	18 P	18	13.20	12.20	10.80	10.10	8.30	7.00	6.10	4.68	3.60
KM	24 P	24	17.50	16.20	14.40	13.50	11.00	9.40	8.10	6.24	4.80
KM	30 P	30	21.90	20.30	18.00	16.90	13.80	11.70	10.10	7.80	6.00
KM	40 P	40	30.80	27.10	24.00	22.50	18.30	15.60	13.40	10.40	8.00
KM	45 P	45	34.60	30.50	27.00	25.30	20.60	17.50	15.10	11.70	9.00
KM	55 P	55	42.30	37.20	33.00	31.00	25.20	21.40	18.40	14.30	11.00
KM	60 P	60	50.00	44.00	39.00	36.60	29.80	25.30	21.90	17.00	12.00
KM	65 P	65	51.00	48.00	44.00	41.00	32.00	27.10	23.90	17.80	13.00
KM	75 P	75	59.00	56.00	50.00	47.00	37.00	31.30	27.50	20.50	15.00
KM	90 P	90	71.00	67.00	61.00	56.00	44.00	37.60	33.10	24.60	18.00
KM	110 P	110	87.00	82.00	74.00	69.00	54.00	45.90	40.40	30.10	22.00
KM	125 P	125	98.00	88.00	79.00	72.00	59.00	51.00	44.50	35.40	25.00
KM	140 P	140	109.00	99.00	89.00	81.00	66.00	57.00	49.50	39.60	28.00
KM	160 P	160	125.00	113.00	101.00	92.00	76.00	65.00	57.00	45.30	32.00
KM	185 P	185	144.00	131.00	117.00	106.00	88.00	75.00	66.00	52.30	37.00
KM	205 P	205	160.00	145.00	130.00	118.00	97.00	83.00	73.00	58.00	41.00
KM	225 P	225	169.00	153.00	137.00	124.00	102.00	91.00	80.00	60.00	45.00
KM	250 P	250	187.00	170.00	152.00	138.00	114.00	101.00	89.00	66.70	50.00
KM	270 P	270	202.00	183.00	164.00	149.00	132.00	109.00	96.00	72.00	54.00
KM	310 P	310	240.00	222.00	197.00	209.00	151.00	137.00	116.00	87.00	62.00
KM	355 P	355	275.00	254.00	226.00	230.00	173.00	157.00	133.00	99.00	71.00
KM	400 P	400	302.00	279.00	248.00	230.00	190.00	172.00	146.00	112.00	80.00

Discharge current of fully charged cells at 20 °C

Final voltage: 1.10 V/cell

Type of cell		C5 Ah	Minutes				Hours				
			5	10	20	30	1	1.5	2	3	5
KM	11 P	11	11.70	10.20	8.60	8.00	6.0	5.24	4.47	3.30	2.33
KM	18 P	18	19.10	16.60	14.10	13.10	10.60	8.60	7.30	5.40	3.82
KM	24 P	24	25.40	22.20	18.80	17.40	14.10	11.40	9.80	7.40	5.09
KM	30 P	30	31.80	27.70	23.50	21.80	17.60	14.30	12.20	9.00	6.36
KM	40 P	40	38.80	34.50	30.80	28.30	23.40	19.00	16.40	12.00	8.48
KM	45 P	45	43.60	38.80	34.60	31.80	26.40	21.40	18.40	13.50	9.54
KM	55 P	55	53.30	47.40	42.30	38.90	32.20	26.10	22.50	16.50	11.60
KM	60 P	60	63.00	56.00	50.00	46.00	38.10	30.90	26.40	20.10	12.60
KM	65 P	65	71.00	66.00	59.00	54.00	41.00	33.40	28.80	20.40	13.80
KM	75 P	75	82.00	76.00	68.00	62.00	48.00	38.60	33.20	23.10	15.90
KM	90 P	90	98.00	92.00	82.00	74.00	57.00	46.30	39.90	28.20	19.10
KM	110 P	110	120.00	112.00	100.00	91.00	70.00	56.60	48.70	34.50	23.30
KM	125 P	125	128.00	130.00	107.00	98.00	75.00	64.00	54.30	39.60	26.30
KM	140 P	140	143.00	148.00	120.00	109.00	88.00	72.00	60.80	44.40	29.40
KM	160 P	160	164.00	171.00	137.00	125.00	101.00	82.00	69.50	50.70	33.50
KM	185 P	185	190.00	190.00	158.00	144.00	116.00	95.00	80.00	58.70	38.40
KM	205 P	205	210.00	200.00	175.00	160.00	129.00	105.00	89.00	65.00	43.10
KM	225 P	225	221.00	222.00	184.00	169.00	136.00	115.00	98.00	77.60	47.30
KM	250 P	250	246.00	240.00	205.00	187.00	151.00	128.00	109.00	83.80	52.60
KM	270 P	270	266.00	290.00	221.00	202.00	163.00	138.00	117.00	97.00	56.80
KM	310 P	310	322.00	332.00	269.00	240.00	194.00	171.00	138.00	111.00	65.10
KM	355 P	355	369.00	365.00	308.00	275.00	222.00	196.00	157.00	125.00	74.60
KM	400 P	400	405.00	365.00	338.00	302.00	244.00	215.00	173.00	125.00	84.00

Discharge current of fully charged cells at 20 °C

Final voltage: 1.05 V/cell

Type of cell		C5 Ah	Minutes				Hours				
			5	10	20	30	1	1.5	2	3	5
KM	11 P	11	14.70	13.40	11.20	9.90	7.50	6.16	5.02	3.52	2.38
KM	18 P	18	24.10	21.90	18.30	16.10	12.30	10.10	8.20	5.76	3.89
KM	24 P	24	32.40	29.20	24.40	21.50	16.40	13.40	11.00	7.68	5.18
KM	30 P	30	40.20	36.50	30.50	26.90	20.50	16.80	13.70	9.60	6.48
KM	40 P	40	49.20	43.10	36.90	33.80	27.40	22.50	18.20	12.80	8.64
KM	45 P	45	55.40	48.50	41.50	38.10	30.80	25.30	20.50	14.40	9.72
KM	55 P	55	67.70	59.20	50.80	46.50	37.50	30.80	25.00	17.60	11.88
KM	60 P	60	80.00	70.00	60.00	55.00	44.50	36.50	29.60	21.00	12.80
KM	65 P	65	86.00	78.00	70.00	64.00	47.00	38.40	30.60	21.20	14.10
KM	75 P	75	98.00	90.00	80.00	74.00	55.00	44.30	35.30	24.50	16.20
KM	90 P	90	118.00	108.00	97.00	88.00	65.00	53.20	42.40	29.40	19.50
KM	110 P	110	133.00	132.00	118.00	108.00	80.00	65.00	51.80	35.90	23.80
KM	125 P	125	154.00	139.00	127.00	116.00	89.00	74.00	59.10	41.20	26.90
KM	140 P	140	181.00	164.00	150.00	137.00	105.00	83.00	66.20	46.20	30.10
KM	160 P	160	207.00	187.00	172.00	156.00	120.00	95.00	75.70	52.80	34.40
KM	185 P	185	239.00	217.00	199.00	180.00	139.00	110.00	88.00	61.00	39.80
KM	205 P	205	265.00	240.00	220.00	200.00	154.00	122.00	97.00	67.60	44.10
KM	225 P	225	279.00	253.00	232.00	211.00	162.00	134.00	106.00	74.20	48.40
KM	250 P	250	310.00	281.00	258.00	234.00	180.00	149.00	118.00	82.40	53.80
KM	270 P	270	335.00	303.00	278.00	253.00	195.00	161.00	128.00	89.00	58.10
KM	310 P	310	389.00	358.00	326.00	293.00	231.00	191.00	145.00	99.00	66.70
KM	355 P	355	446.00	410.00	373.00	336.00	264.00	218.00	167.00	114.00	76.30
KM	400 P	400	490.00	450.00	410.00	369.00	290.00	240.00	183.00	128.00	86.00

Discharge current of fully charged cells at 20 °C

Final voltage: 1.00 V/cell

Type of cell		C5 Ah	Minutes				Hours				
			5	10	20	30	1	1.5	2	3	5
KM	11 P	11	16.90	15.90	13.50	11.80	8.60	6.71	5.32	3.70	2.42
KM	18 P	18	27.70	26.00	22.10	19.40	14.00	11.00	8.70	6.08	3.96
KM	24 P	24	37.00	34.70	29.50	25.80	18.70	14.60	11.60	8.08	5.28
KM	30 P	30	46.20	43.40	36.90	32.30	23.40	18.30	14.50	10.10	6.60
KM	40 P	40	55.40	50.50	42.50	40.00	31.10	24.40	19.40	13.46	8.80
KM	45 P	45	62.30	56.80	47.80	45.00	35.00	27.40	21.80	15.14	9.90
KM	55 P	55	76.20	69.40	58.40	55.00	42.80	33.50	26.70	18.51	12.10
KM	60 P	60	90.00	82.00	69.00	65.00	50.60	39.60	31.50	21.40	13.20
KM	65 P	65	98.00	91.00	80.00	74.00	54.00	40.70	32.50	21.90	14.30
KM	75 P	75	113.00	105.00	93.00	85.00	62.00	46.90	36.90	25.20	16.50
KM	90 P	90	135.00	126.00	111.00	102.00	74.00	56.30	44.30	30.30	19.80
KM	110 P	110	165.00	154.00	136.00	125.00	91.00	68.80	54.10	37.00	24.20
KM	125 P	125	182.00	168.00	151.00	139.00	101.00	79.00	61.00	42.10	27.50
KM	140 P	140	215.00	198.00	178.00	164.00	137.00	89.00	68.30	47.10	30.80
KM	160 P	160	246.00	226.00	203.00	187.00	158.00	101.00	78.00	53.90	35.220
KM	185 P	185	284.00	262.00	235.00	217.00	175.00	117.00	90.00	62.30	40.70
KM	205 P	205	315.00	290.00	260.00	240.00	175.00	130.00	100.00	69.00	45.10
KM	225 P	225	332.00	306.00	274.00	253.00	184.00	143.00	110.00	75.70	49.50
KM	250 P	250	369.00	340.00	304.00	281.00	205.00	159.00	122.00	84.10	55.00
KM	270 P	270	398.00	367.00	329.00	303.00	221.00	171.00	132.00	90.90	59.40
KM	310 P	310	475.00	429.00	382.00	347.00	258.00	193.00	149.00	102.00	68.20
KM	355 P	355	544.00	492.00	438.00	397.00	296.00	221.00	170.00	116.00	78.10
KM	400 P	400	598.00	540.00	481.00	436.00	325.00	243.00	187.00	131.00	88.00