

Power

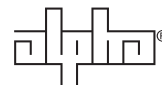
NiCad Low Maintenance Series

Extreme Low Maintenance Batteries



- Nickel cadmium storage battery
- Exceptionally long life time minimizes maintenance
- 20 year design life
- Low pressure flame arresting vent
- Pocket plate design
- Two battery ranges designed for different discharge ranges:
 - KGL/P: Low discharge rates over long periods of time
 - KGM/P: Both high and low discharge rates for combination loads
- 5 year full warranty

Alpha's Nickel Cadmium Low Maintenance Pocket Plate Batteries are designed for UPS systems, emergency lighting, process control, telecommunication, power and substations, oil and gas refineries and railroad signaling applications. This new series of batteries are suited for situations where the risk of failure is not acceptable and where the system must work completely reliable requiring a minimum of maintenance. The KGL/P batteries are used for low rates of discharge over long periods and the discharge time is 1 to 100 hours. The KGM/P batteries are ideal for mixed loads including a mixture of high and low rates of discharge and the discharge time is 30 minutes to 10 hours. Each battery is delivered in charged condition filled with electrolyte. Build in accordance with IEC 60 623, EN60 623, and DIN 40 771.



NiCad Low Maintenance Series

General Specifications

Model:	KGL	KGM
Standard Warranty:	2 yr full plus 18 yr prorated	2 yr full plus 18 yr prorated
Service Life:	20 yr	20 yr
Range of Capacity:	12 to 1390Ah	11 to 1250Ah
Recommended Discharge Time:	1 to 100hrs	30 to 120min
Operating Range:	-30 to 45°C (-22 to 113°F)	-30 to 45°C (-22 to 113°F)
Terminal Type:	Threaded Nickel Plated Posts	Threaded Nickel Plated Posts
Float Charge:	1.42V/cell	1.42V/cell
Boost Charge:	1.45V/cell	1.45V/cell
Current Limitation:	0.1 I _A	0.1 I _A

KGM/P Mechanical Specifications

Type	L (in/mm)	W (in/mm)	H (in/mm)	Weight (lb/kg)
KGM 11 P	1.8/46	3.3/85	7.3/187	2.3/1.03
KGM 18 P	1.8/46	3.3/85	9.5/257	3.3/1.48
KGM 24 P	1.8/46	3.3/85	9.5/257	3.5/1.59
KGM 30 P	1.8/46	3.3/85	9.5/257	3.8/1.72
KGM 40 P	3.3/85	3.3/85	9.5/257	6.1/2.76
KGM 48 P	3.3/85	3.3/85	9.5/257	6.2/2.82
KGM 55 P	3.3/85	3.3/85	9.5/257	6.5/2.97
KGM 65 P	2.1/53	5.3/134	15.4/392	10.7/4.85
KGM 75 P	2.1/53	5.3/134	15.4/392	11.0/5.00
KGM 90 P	2.7/69	5.3/134	15.4/392	13.6/6.18
KGM 110 P	2.7/69	5.3/134	15.4/392	14.4/6.51
KGM 125 P	2.8/70	6.5/164	15.4/392	16.9/7.67
KGM 140 P	2.8/70	6.5/164	15.4/392	17.3/7.84
KGM 160 P	4.3/108	6.5/164	15.4/392	23.4/10.61
KGM 185 P	4.3/108	6.5/164	15.4/392	24.0/10.91
KGM 205 P	4.3/108	6.5/164	15.4/392	24.6/11.17
KGM 225 P	4.3/108	6.5/164	15.4/392	25.6/11.62
KGM 250 P	4.3/108	6.5/164	15.4/392	26.9/12.22
KGM 270 P	6.5/164	6.2/158	15.4/392	35.9/16.30
KGM 300 P	6.5/164	6.2/158	15.4/392	36.4/16.50
KGM 320 P	6.5/164	6.2/158	15.4/392	37.5/17.00
KGM 340 P	6.5/164	6.2/158	15.4/392	38.6/17.50
KGM 355 P	6.5/164	6.2/158	15.4/392	39.7/18.00
KGM 380 P	6.5/164	6.2/158	15.4/392	40.8/18.50
KGM 400 P	6.5/164	6.2/158	15.4/392	41.7/18.90
KGM 450 P	6.9/176	9.7/246	16.1/408	60.2/27.30
KGM 500 P	6.9/176	9.7/246	16.1/408	62.4/28.30
KGM 550 P	6.9/176	9.7/246	16.1/408	64.6/29.30
KGM 600 P	6.9/176	14.5/368	16.1/408	89.7/40.70
KGM 675 P	6.9/176	14.5/368	16.1/408	92.4/41.90
KGM 750 P	6.9/176	14.5/368	16.1/408	95.0/43.10
KGM 1000 P	6.9/176	17.6/448	16.1/408	123.5/56.00
KGM 1250 P	6.9/176	22.0/558	16.1/408	151.9/68.9

KGL/P Mechanical Specifications

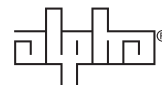
Type	L (in/mm)	W (in/mm)	H (in/mm)	Weight (lb/kg)
KGL 12 P	1.8/46	3.3/85	7.3/187	2.3/1.03
KGL 20 P	1.8/46	3.3/85	9.5/257	3.3/1.48
KGL 25 P	1.8/46	3.3/85	9.5/257	3.3/1.51
KGL 35 P	1.8/46	3.3/85	9.5/257	3.6/1.64
KGL 45 P	3.3/85	3.3/85	9.5/257	5.9/2.68
KGL 50 P	3.3/85	3.3/85	9.5/257	6.2/2.82
KGL 60 P	3.3/85	3.3/85	15.4/392	6.5/2.97
KGL 70 P	2.1/53	5.3/134	15.4/392	10.7/4.85
KGL 80 P	2.1/53	5.3/134	15.4/392	11.0/5.00
KGL 100 P	2.7/69	5.3/134	15.4/392	13.6/6.18
KGL 120 P	2.7/69	5.3/134	15.4/392	14.4/6.51
KGL 135 P	2.8/70	6.5/164	15.4/392	16.9/7.67
KGL 155 P	2.8/70	6.5/164	15.4/392	17.3/7.84
KGL 175 P	4.3/108	6.5/164	15.4/392	23.4/10.61
KGL 205 P	4.3/108	6.5/164	15.4/392	24.0/10.91
KGL 225 P	4.3/108	6.5/164	15.4/392	24.6/11.17
KGL 245 P	4.3/108	6.5/164	15.4/392	25.6/11.62
KGL 275 P	4.3/108	6.5/164	15.4/392	26.9/12.22
KGL 300 P	6.5/164	6.2/158	15.4/392	35.9/16.30
KGL 330 P	6.5/164	6.2/158	15.4/392	36.4/16.50
KGL 350 P	6.5/164	6.2/158	15.4/392	37.5/17.00
KGL 375 P	6.5/164	6.2/158	15.4/392	38.6/17.50
KGL 390 P	6.5/164	6.2/158	15.4/392	39.7/18.00
KGL 420 P	6.5/164	6.2/158	15.4/392	40.8/18.50
KGL 440 P	6.5/164	6.2/158	15.4/392	41.7/18.90
KGL 500 P	6.9/176	9.7/246	16.1/408	60.2/27.30
KGL 555 P	6.9/176	9.7/246	16.1/408	62.4/28.30
KGL 610 P	6.9/176	9.7/246	16.1/408	64.6/29.30
KGL 665 P	6.9/176	14.5/368	16.1/408	89.7/40.70
KGL 750 P	6.9/176	14.5/368	16.1/408	92.4/41.90
KGL 835 P	6.9/176	14.5/368	16.1/408	95.0/43.10
KGL 1110 P	6.9/176	17.6/448	16.1/408	123.5/56.00
KGL 1390 P	6.9/176	22.0/558	16.1/408	151.9/68.9



NiCad Low Maintenance Series

KGM/P Discharge Current (A) to End Voltage 1.00VPC at 25C (77F Fully Charged)

Type	Minutes				Hours									
	5	10	20	30	1	1.5	2	3	5	6	7	8	9	10
KGM 11 P	16	15	13	11	8	7	5	4	2	2	2	2	1	1
KGM 18 P	27	25	21	19	14	11	8	6	4	3	3	2	2	2
KGM 24 P	36	33	29	26	19	14	11	8	5	4	4	3	3	3
KGM 30 P	44	42	36	32	24	18	14	10	7	6	5	4	4	3
KGM 40 P	53	49	41	43	32	24	19	13	9	7	6	6	5	4
KGM 48 P	70	64	53	51	37	30	23	16	11	9	8	7	6	5
KGM 55 P	86	79	65	59	43	35	27	19	12	10	9	8	7	6
KGM 65 P	94	88	77	72	52	40	31	22	14	12	10	9	8	7
KGM 75 P	109	101	90	82	60	46	36	25	17	14	12	10	9	8
KGM 90 P	130	121	107	99	72	55	43	30	20	17	14	12	11	10
KGM 110 P	158	148	131	121	88	67	53	36	24	20	17	15	14	12
KGM 125 P	175	162	146	135	98	77	60	41	28	23	20	17	15	14
KGM 140 P	206	191	172	159	116	87	67	46	31	26	22	19	17	16
KGM 160 P	236	217	196	181	133	98	76	53	35	29	25	22	20	18
KGM 185 P	273	252	227	210	153	114	88	61	41	34	29	26	23	21
KGM 205 P	302	279	251	232	170	126	98	68	45	38	32	28	25	23
KGM 225 P	319	294	264	245	180	139	107	74	50	41	36	31	28	25
KGM 250 P	354	327	293	272	199	155	119	82	55	46	39	35	31	28
KGM 270 P	382	353	318	293	216	166	129	89	60	50	43	37	33	30
KGM 300 P	442	399	357	324	243	182	140	96	66	55	47	42	37	33
KGM 320 P	471	426	381	347	259	193	149	103	70	59	51	44	39	36
KGM 340 P	500	453	404	368	275	206	159	109	75	63	54	47	42	38
KGM 355 P	522	473	423	384	287	215	166	114	78	65	56	49	44	39
KGM 380 P	560	506	453	411	306	230	178	122	84	70	60	53	47	42
KGM 400 P	574	520	464	422	315	236	182	128	88	74	63	55	49	44
KGM 450 P	637	589	528	479	354	289	223	155	100	83	72	63	56	50
KGM 500 P	708	654	587	535	394	321	248	172	111	93	80	70	62	56
KGM 550 P	780	720	646	586	433	353	273	189	122	102	88	77	68	62
KGM 600 P	850	785	703	639	472	385	297	207	133	111	95	84	75	68
KGM 675 P	956	883	792	719	532	434	335	232	150	125	108	94	84	76
KGM 750 P	1063	981	880	799	590	481	372	258	167	139	120	105	94	84
KGM 1000 P	1417	1306	1173	1065	787	642	496	344	222	185	159	140	124	112
KGM 1250 P	1770	1635	1466	1331	984	802	620	430	278	232	199	175	156	140



NiCad Low Maintenance Series

KGL/P Discharge Current (A) to End Voltage 1.00VPC at 25C (77F Fully Charged)

Type	Minutes				Hours										
	5	10	20	30	1	1.5	2	3	4	5	6	7	8	9	10
KGL 12 P	13	12	11	10	7	6	5	3	3	2	2	2	2	1	1
KGL 20 P	21	20	18	16	12	10	8	6	5	4	3	3	3	2	2
KGL 25 P	28	27	24	22	17	13	10	7	6	5	4	4	3	3	3
KGL 35 P	35	33	30	27	21	16	13	9	8	7	6	5	4	4	4
KGL 45 P	42	39	34	36	28	21	17	12	10	9	8	6	6	5	5
KGL 50 P	55	51	44	43	32	26	21	15	12	10	8	7	6	6	5
KGL 60 P	68	63	54	50	38	31	25	18	14	12	10	9	8	7	6
KGL 70 P	74	70	64	61	46	35	28	20	16	14	12	10	9	8	7
KGL 80 P	85	80	74	70	53	41	33	23	18	16	13	11	10	9	8
KGL 100 P	101	96	89	84	63	49	39	28	23	20	17	14	13	11	10
KGL 120 P	124	118	109	103	77	60	48	35	27	24	20	17	15	13	12
KGL 135 P	137	129	121	114	86	68	54	39	31	27	23	19	17	15	14
KGL 155 P	161	151	142	134	102	77	60	43	35	31	26	22	19	17	16
KGL 175 P	185	173	162	153	116	87	69	49	40	35	29	25	22	20	18
KGL 205 P	213	200	188	178	134	101	79	57	47	41	34	29	26	23	21
KGL 225 P	234	222	208	197	149	112	88	63	51	45	38	32	28	25	23
KGL 245 P	249	234	219	207	158	124	97	69	56	49	41	35	31	27	25
KGL 275 P	277	260	243	230	174	138	107	77	62	55	46	39	35	31	28
KGL 300 P	299	281	263	248	190	148	116	83	68	60	50	43	38	34	30
KGL 330 P	345	317	294	275	213	162	127	90	74	66	55	47	42	37	33
KGL 350 P	368	339	316	294	227	172	135	96	79	70	59	50	44	39	35
KGL 375 P	391	360	335	312	241	183	143	102	84	75	63	54	47	42	38
KGL 390 P	408	376	350	326	252	191	150	106	88	78	65	56	49	44	39
KGL 420 P	437	402	375	349	269	205	160	113	94	84	70	60	53	47	42
KGL 440 P	449	413	385	358	276	210	165	120	99	88	74	63	55	49	44
KGL 500 P	664	612	547	495	365	297	229	158	122	100	83	72	63	56	50
KGL 555 P	738	680	608	550	406	330	254	176	136	111	93	80	70	62	56
KGL 610 P	812	748	669	605	446	363	280	193	149	122	102	88	77	69	62
KGL 665 P	885	816	729	660	487	396	305	211	162	133	111	95	84	45	67
KGL 750 P	996	918	821	743	548	446	344	237	183	150	125	108	94	84	76
KGL 835 P	1107	1020	912	825	608	495	382	263	203	167	139	120	105	94	84
KGL 1110 P	1476	1360	1216	1100	811	660	209	351	270	222	185	159	140	124	112
KGL 1390 P	1844	1700	1519	1375	1041	825	636	439	337	278	232	199	175	156	140

For more information visit www.alpha.com

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