# CHANGHONG ®



### Changhong Gas Recombination Battery

Sichuan Changhong Battery Co., Ltd.

#### **Ideal Choice of New Backup Power**

The new type battery——Changhong Gas Recombination Battery, combined mature pocket battery technology, blended in Changhong new technology, obtained Ultralow maintenance or even free maintenance characteristics, becomes an ideal choice of new backup power.





- · Infrequency Water filling, gas recombination is controlled, no failure risk.
- Work temperature ranges from -50°C to 70°C.
- · High electrical and physical abuse durability, suitable for various kinds of operation conditions, low maintenance, safe and reliable.
- Comply with IEC62259-2003, IEC60623-2001 and IEC61373-2010 standards.

#### **Distinct Superiority**

As the backup power solution, high reliability and easy maintenance are required. New generation Changhong Gas Recombination Battery has special advantages as follows:



### Technology Superiority

- The electrode uses steel tape as the framework. No react with electrolyte and remain complete during the whole service life.
- The separator is made of polypropylene fiber felt.
- · No electrolyte replacement within service life.
- · Terminals are made of steel or copper which has excellent electric conductivity and high mechanical strength.
- · Battery case is made of high strength, corrosion resisting, translucent engineering plastics
- No sudden death risk.
- Gas recombination efficiency can reach 85% ~ 95%.
- Ultra high gas recombination efficiency, which reduces 90% water consumption.

#### Long life with low maintenance

- · Within service life, the battery needs water refilling for 1 time at most.
- · The cycle life is over 2000 times and the service life can exceed 25 years.

#### Battery Models

We have Alternative low and medium rate batteries with capacity ranging from 30Ah to 600Ah, and we can also design the batteries according to customers' demands.





### **Application Fields**

Electric power

Communication

Rail transit

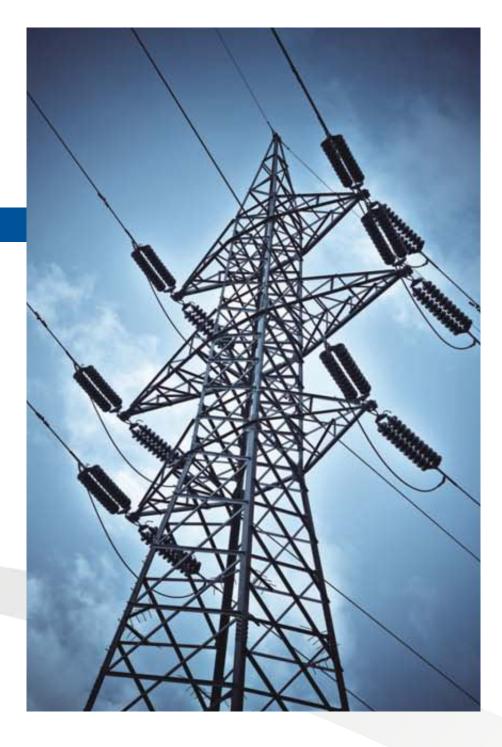
Metallurgy

Mining industry

Lighting

Backup power

Solar energy and wind energy











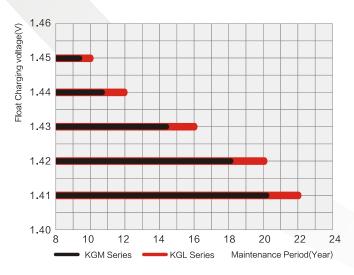


Figure 1 Maintenance cycle of KGL series and KGM series battery under different float charging voltage (  $20\,^\circ\! C$  )

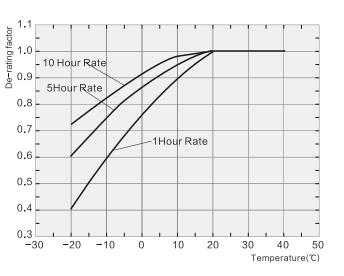


Figure 2 Temperature Effect Curves of KGM Series

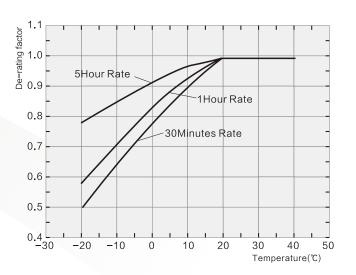


Figure 3 Temperature Effect Curves of KGM Series

# Name of the Properties Physical Properties



### **KGL Series**

Model	Nominal Voltage V	Rated Capacity C₅ Ah	Max. Ex	ternal Dir mm	nension	Max. Weight kg	Electrolyte Volume L	Terminal Size	Container Material
KGL30	1.2	30	68	134	245	2.8	0.8	M10×1	PP
KGL40	1.2	40	68	134	245	2.9	0.8	M10×1	PP
KGL50	1.2	50	70	134	285	4.1	0.9	M16	ABS OR PP
KGL60	1.2	60	70	134	285	4.2	0.9	M16	ABS OR PP
KGL70	1.2	70	70	134	285	4.3	0.8	M16	ABS OR PP
KGL80	1.2	80	80	141	365	5.8	1.7	M10 × 1	PP
KGL90	1.2	90	80	141	365	6	1.5	M10 × 1	PP
KGL100	1.2	100	80	141	365	6.2	1.6	M10 × 1	PP
KGL150	1.2	150	107	165	350	9	2.5	M20	ABS OR PP
KGL200	1.2	200	100	171	450	12.5	2.7	M20	ABS OR PP
KGL250	1.2	250	100	171	450	13.5	2.3	M20	ABS OR PP
KGL300	1.2	300	138	276	450	21	5.5	M16	ABS OR PP
KGL350	1.2	350	152	170	385	17.5	4.7	M20	PP
KGL400	1.2	400	138	276	450	23.2	4.8	2×M16	PP
KGL500	1.2	500	138	276	490	27	6.1	2×M16	PP
KGL600	1.2	600	176	291	510	38	9.1	2×M20	ABS





### KGM Series

Model	Nominal Voltage	Rated Capacity	Max. Ex	ternal Dir mm	mension	Max. Weight	Electrolyte Volume	Terminal	Container
Model	Voltage	C <sub>5</sub> Ah	Length		Height	kg	L	Size	Material
KGM30	1.2	30	70	134	285	3.9	0.7	M16	ABS OR PP
KGM40	1.2	40	70	134	285	4	1	M16	ABS OR PP
KGM50	1.2	50	80	141	370	5.8	1	M16	ABS OR PP
KGM60	1.2	60	80	141	370	6	1.8	M16	ABS OR PP
KGM70	1.2	70	80	141	370	6.4	1.5	M16	ABS OR PP
KGM80	1.2	80	80	141	370	6.6	1.4	M16	ABS OR PP
KGM90	1.2	90	107	165	350	8.8	2.3	M20	ABS OR PP
KGM100	1.2	100	107	165	350	9	2.1	M20	ABS OR PP
KGM150	1.2	150	164	167	345	13	3.7	M20	ABS OR PP
KGM200	1.2	200	138	276	425	20	5.2	2×M16	PP
KGM250	1.2	250	138	276	450	22	5.3	2×M16	PP
KGM300	1.2	300	138	276	450	23	4.7	2×M16	PP
KGM350	1.2	350	176	291	510	37	11.2	2×M20	ABS
KGM400	1.2	400	176	291	510	38	10.8	2×M20	ABS
KGM500	1.2	500	176	291	510	40	9.1	2×M20	ABS
KGM600	1.2	600	176	291	510	42	8.2	2×M20	ABS

Our company could design new battery and Combine-unit, Combination frame, Combo box etc. for supporting the battery; We can also provide battery total solution as per customer.
Our company is committed to technical innovation, and continuously provides better products and services to meet customers' demand. About the update of product design and technical specification, unless special noticed, please reference to specific project.

### **Electrical Properties** KGL series



Discharge performance data after prolonged float charge of fully charged cell Available current under 20°C ±5°C Final voltage1.0V/cell

Madala	C <sub>5</sub>			ŀ	Hour	S					Min	utes			Se	econ	ds
Models	Ah	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGL30	30	3.06	3.78	6.00	9.69	13.2	16.5	20.5	23.3	24.7	25.6	26.8	28.6	32.4	34.2	38.7	43.5
KGL40	40	4.08	5.04	8.00	12.9	17.6	22.0	27.4	31.1	32.9	34.2	35.7	38.2	43.2	45.6	51.6	58.0
KGL50	50	5.10	6.30	10.0	16.2	22.1	27.5	34.2	38.9	41.2	42.7	44.6	47.7	54.0	57.0	64.5	72.5
KGL60	60	6.12	7.56	12.0	19.4	26.5	33.0	41.0	46.6	49.4	51.2	53.5	57.2	64.8	68.4	77.4	87.0
KGL70	70	7.14	8.82	14.0	22.6	30.9	38.5	47.9	54.4	57.6	59.8	62.4	66.8	75.6	79.8	90.3	102
KGL80	80	8.16	10.1	16.0	25.8	35.3	44.0	54.7	62.2	65.8	68.3	71.4	76.3	86.4	91.2	103	116
KGL100	100	10.2	12.6	20.0	32.3	44.1	55.0	68.4	77.7	82.3	85.4	89.2	95.4	108	114	129	145
KGL120	120	12.2	15.1	24.0	38.8	52.9	66.0	82.1	93.2	98.8	102	107	114	130	137	155	174
KGL150	150	15.3	18.9	30.0	48.5	66.2	82.5	103	117	123	128	134	143	162	171	194	218
KGL200	200	20.4	25.2	40.0	65.1	88.5	110	137	155	164	171	178	190	216	228	259	288
KGL250	250	25.5	31.5	50.0	80.8	110	135	167	190	201	210	218	233	262	276	308	338
KGL300	300	30.6	37.8	60.0	96.9	132	162	201	228	241	251	261	279	314	332	369	406
KGL350	350	35.7	44.1	70.0	113	154	189	234	266	281	293	305	325	366	387	430	474
KGL400	400	40.8	50.4	80.0	129	177	216	267	304	322	336	348	372	419	442	492	541
KGL500	500	51.0	63.0	100	162	220	270	333	380	402	419	435	465	524	552	615	676
KGL600	600	61.2	75.6	120	194	264	324	400	456	482	503	522	558	629	662	738	811

# **Electrical Properties** KGL series



Discharge performance data after prolonged float charge of fully charged cell Available current under 20°C ±5°C Final voltage1.05V/cell

NA - al - la	C <sub>5</sub>			ŀ	Hour	S					Min	utes			Se	econ	ds
Models	Ah	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGL30	30	3.03	3.75	5.94	8.67	11.6	14.1	16.3	19.3	20.3	21.0	21.9	23.3	27.0	28.9	32.7	35.7
KGL40	40	4.04	5.00	7.92	11.6	15.5	18.8	21.7	25.7	27.0	28.0	29.2	31.1	36.0	38.5	43.6	47.6
KGL50	50	5.05	6.25	9.90	14.5	19.4	23.5	27.1	32.1	33.8	35.1	36.5	38.9	45.0	48.1	54.5	59.5
KGL60	60	6.06	7.50	11.9	17.3	23.3	28.2	32.5	38.5	40.5	42.1	43.8	46.6	54.0	57.7	65.4	71.4
KGL70	70	7.07	8.75	13.9	20.2	27.2	32.9	37.9	44.9	47.3	49.1	51.1	54.4	63.0	67.3	76.3	83.3
KGL80	80	8.08	10.00	15.8	23.1	31.0	37.6	43.4	51.4	54.0	56.1	58.4	62.2	72.0	77.0	87.2	95.2
KGL100	100	10.1	12.5	19.8	28.9	38.8	47.0	54.2	64.2	67.5	70.1	73.0	77.7	90.0	96.2	109	119
KGL120	120	12.1	15.0	23.8	34.7	46.6	56.4	65.0	77.0	81.0	84.1	87.6	93.2	108	115	131	143
KGL150	150	15.2	18.8	29.7	43.4	58.2	70.5	81.3	96.3	101	105	110	117	135	144	164	179
KGL200	200	20.2	25.1	39.8	57.3	76.5	92.4	108	128	135	140	146	156	180	193	218	239
KGL250	250	25.3	31.3	49.5	72.3	97.0	116	134	157	165	170	178	190	220	233	263	286
KGL300	300	29.3	36.3	57.4	83.8	113	134	155	182	191	197	206	220	255	270	305	332
KGL350	350	34.3	42.5	67.3	98.3	132	157	182	214	224	231	241	258	299	317	357	389
KGL400	400	38.4	47.6	75.2	110	147	176	203	239	251	258	270	289	334	354	399	434
KGL500	500	42.4	52.5	83.2	121	163	194	224	264	277	285	298	319	370	392	441	480
KGL600	600	50.9	63.0	99.8	145	196	233	269	317	332	342	358	383	444	470	529	576

### Lectrical Properties KGL series



Discharge performance data after prolonged float charge of fully charged cell Final voltage1.10V/cell Available current under 20°C ±5°C

Models	C <sub>5</sub>			ŀ	Hours	S					Min	utes			Se	econ	ds
Models	Ah	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGL30	30	2.89	3.57	5.25	7.68	10.2	11.7	13.4	15.0	15.8	16.7	17.6	19.1	21.9	23.0	25.1	27.2
KGL40	40	3.85	4.76	7.00	10.2	13.6	15.6	17.9	20.0	21.0	22.2	23.4	25.4	29.2	30.6	33.5	36.3
KGL50	50	4.81	5.95	8.75	12.8	17.1	19.5	22.4	25.1	26.3	27.8	29.3	31.8	36.5	38.3	41.9	45.4
KGL60	60	5.77	7.14	10.5	15.4	20.5	23.4	26.8	30.1	31.5	33.3	35.1	38.1	43.8	45.9	50.3	54.5
KGL70	70	6.73	8.33	12.3	17.9	23.9	27.3	31.3	35.1	36.8	38.9	41.0	44.5	51.1	53.6	58.7	63.6
KGL80	80	7.70	9.52	14.0	20.5	27.3	31.2	35.8	40.1	42.0	44.4	46.8	50.8	58.4	61.2	67.0	72.6
KGL100	100	9.62	11.9	17.5	25.6	34.1	39.0	44.7	50.1	52.5	55.5	58.5	63.5	73.0	76.5	83.8	90.8
KGL120	120	11.5	14.3	21.0	30.7	40.9	46.8	53.6	60.1	63.0	66.6	70.2	76.2	87.6	91.8	101	109
KGL150	150	14.4	17.9	26.3	38.4	51.2	58.5	67.1	75.2	78.8	83.3	87.8	95.3	110	115	126	136
KGL200	200	19.2	23.8	35.0	51.2	68.2	78.0	89.7	100	105	111	117	127	146	153	168	181
KGL250	250	24	29.8	43.8	64.0	84.8	96.3	110	123	130	136	144	156	180	186	195	201
KGL300	300	27.8	34.5	50.8	74.2	98.3	112	127	143	150	158	167	181	209	216	226	233
KGL350	350	32.6	40.5	59.5	87.0	115	131	149	168	176	185	196	213	245	253	265	273
KGL400	400	36.5	45.2	66.5	97.6	129	146	167	187	197	207	219	238	274	283	296	306
KGL500	500	40.3	50	73.5	108	142	162	184	207	218	229	242	263	302	313	328	338
KGL600	600	48.4	60	88.2	130	170	194	221	248	262	275	290	316	362	376	394	406

# \( \sum\_{\text{Electrical Properties}} \) KGL series



Discharge performance data after prolonged float charge of fully charged cell Available current under  $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Final voltage1.14V/cell

Models	C <sub>5</sub>			ŀ	Hours	S					Min	utes			Se	econ	ds
Models	Ah	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGL30	30	2.70	3.36	4.53	6.78	7.92	8.55	9.15	10.4	11.3	11.9	12.6	13.8	16.3	17.2	19.8	22.1
KGL40	40	3.60	4.48	6.04	9.04	10.6	11.4	12.2	13.9	15.0	15.9	16.8	18.4	21.8	22.9	26.4	29.4
KGL50	50	4.50	5.60	7.55	11.3	13.2	14.3	15.3	17.4	18.8	19.9	21.0	23.0	27.2	28.6	33.0	36.8
KGL60	60	5.40	6.72	9.06	13.6	15.8	17.1	18.3	20.9	22.5	23.8	25.2	27.6	32.6	34.3	39.6	44.2
KGL70	70	6.30	7.84	10.6	15.8	18.5	20.0	21.4	24.4	26.3	27.8	29.4	32.2	38.1	40.0	46.2	51.5
KGL80	80	7.20	8.96	12.1	18.1	21.1	22.8	24.4	27.8	30.0	31.8	33.6	36.8	43.5	45.8	52.8	58.9
KGL100	100	9.00	11.2	15.1	22.6	26.4	28.5	30.5	34.8	37.5	39.7	42.0	46.0	54.4	57.2	66.0	73.6
KGL120	120	10.8	13.4	18.1	27.1	31.7	34.2	36.6	41.8	45.0	47.6	50.4	55.2	65.3	68.6	79.2	88.3
KGL150	150	13.5	16.8	22.7	33.9	39.6	42.8	45.8	52.2	56.3	59.6	63.0	69.0	81.6	85.8	99.0	110
KGL200	200	18.0	22.4	30.2	45.2	56.8	57.0	61.1	69.5	75.0	79.3	84.0	92.0	109	114	132	147
KGL250	250	22.5	28.0	37.8	56.5	70.3	71.3	76.3	85.5	92.0	96.5	103	113	132	140	155	163
KGL300	300	26.1	32.5	43.8	65.5	81.5	82.7	88.5	99.2	107	112	119	131	153	162	180	189
KGL350	350	30.6	38.1	51.3	76.8	95.5	96.9	104	116	125	131	139	153	180	190	211	221
KGL400	400	34.2	42.6	57.4	85.9	107	108	116	130	140	147	156	171	201	213	236	247
KGL500	500	37.8	47.0	63.4	94.9	118	120	128	144	155	162	172	189	222	235	260	273
KGL600	600	45.4	56.4	76.1	114	142	144	154	173	186	194	206	227	266	282	312	328

# **Electrical Properties** KGM series



Discharge performance data after prolonged float charge of fully charged cell Available current under 20°C ±5°C Final voltage1.0V/cell

Models	C <sub>5</sub>			ŀ	Hour	S					Min	utes			Se	econ	ds
Models	Ah	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGM30	30	3.00	3.75	6.00	9.75	14.3	17.6	22.9	30.0	35.4	38.2	40.9	45.8	60.8	67.1	79.1	95.6
KGM40	40	4.00	5.00	8.00	13.0	19.0	23.5	30.5	40.0	47.3	50.9	54.5	61.0	81.0	89.5	106	128
KGM50	50	5.06	6.29	10.0	16.3	23.8	29.4	38.2	49.9	58.5	62.8	67.0	72.8	92.6	102	117	139
KGM60	60	6.13	7.58	12.0	19.6	28.6	35.3	45.9	59.8	69.7	74.6	79.6	84.6	104	114	129	151
KGM70	70	7.15	8.84	14.0	22.9	33.4	41.2	53.5	69.8	81.3	87.1	92.8	98.7	122	133	151	176
KGM80	80	8.17	10.1	16.0	26.2	38.1	47.1	61.1	79.7	92.9	100	106	113	139	152	173	201
KGM100	100	10.2	12.6	20.0	32.7	47.7	58.8	76.4	99.7	116	124	133	141	174	189	216	252
KGM120	120	12.3	15.2	24.0	39.3	57.2	70.6	91.7	120	139	149	159	169	208	227	259	302
KGM150	150	15.3	19.0	30.0	49.1	71.5	88.3	115	150	174	187	199	212	261	284	324	377
KGM200	200	20.4	25.3	39.9	65.4	95.5	118	153	199	232	248	264	282	347	378	431	503
KGM250	250	25.5	31.5	49.9	81.9	120	147	191	249	290	311	332	353	434	473	539	628
KGM300	300	30.6	37.8	59.9	98.3	144	176	229	299	349	373	398	424	521	567	647	754
KGM350	350	35.7	44.1	69.9	115	168	206	268	349	407	436	465	494	607	662	754	879
KGM400	400	40.8	50.4	79.8	131	192	235	306	398	465	498	531	565	694	756	862	1005
KGM500	500	51.1	63.0	99.8	164	239	294	382	498	581	622	664	706	868	945	1078	1256
KGM600	600	61.3	75.6	120	197	287	353	458	598	697	746	797	847	1042	1134	1294	1507

# **Electrical Properties** KGM series



Discharge performance data after prolonged float charge of fully charged cell Available current under  $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Final voltage1.05V/cell

	$C_5$			ŀ	Hours	S					Min	utes			Se	econ	ds
Models	Aĥ	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGM30	30	3.00	3.75	6.00	9.38	13.1	16.1	20.3	24.4	28.1	30.0	31.9	37.1	49.9	56.3	65.6	82.9
KGM40	40	4.00	5.00	8.00	12.5	17.5	21.5	27.0	32.5	37.5	40.0	42.5	49.5	66.5	75.0	87.5	111
KGM50	50	5.03	6.26	9.97	15.9	22.5	26.9	33.1	41.5	47.1	50.0	52.8	59.8	78.1	85.5	97.8	118
KGM60	60	6.06	7.52	11.9	19.3	27.5	32.3	39.1	50.4	56.8	60.0	63.2	70.1	89.7	96.0	108	126
KGM70	70	7.07	8.77	13.9	22.5	32.1	37.7	45.6	58.8	66.2	70.0	73.7	81.8	105	112	126	147
KGM80	80	8.08	10.0	15.9	25.7	36.7	43.1	52.1	67.2	75.7	80.0	84.2	93.5	120	128	144	168
KGM100	100	10.1	12.5	19.9	32.1	45.9	53.9	65.2	84.0	95.0	100	105	117	149	160	180	209
KGM120	120	12.1	15.0	23.9	38.5	55.1	64.7	78.2	101	114	120	126	140	179	192	216	251
KGM150	150	15.2	18.8	29.8	48.2	68.8	80.8	97.7	126	142	150	158	175	224	240	270	314
KGM200	200	20.2	25.0	39.7	64.2	91.7	107	131	168	189	200	211	235	299	321	359	419
KGM250	250	25.2	31.2	49.6	80.4	115	134	163	210	237	250	264	293	374	401	449	524
KGM300	300	30.3	37.4	59.5	96.4	137	161	195	252	284	300	316	352	449	482	538	629
KGM350	350	35.3	43.7	69.4	113	160	188	228	294	332	350	369	410	524	562	628	734
KGM400	400	40.3	49.9	79.3	129	183	215	261	336	379	400	422	469	598	642	718	839
KGM500	500	50.4	62.4	99.2	161	229	269	326	420	474	501	527	586	748	803	897	1048
KGM600	600	60.5	74.9	119	193	275	323	391	504	569	601	632	703	898	964	1076	1258

### **Electrical Properties** KGM series



Discharge performance data after prolonged float charge of fully charged cell Available current under 20°C ±5°C Final voltage1.1V/cell

Models	C <sub>5</sub>			ŀ	Hours	S					Min	utes			Se	econ	ds
Models	Ah	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGM30	30	3.00	3.75	6.00	8.63	11.3	13.1	16.5	19.9	22.1	23.3	24.4	28.5	39.4	44.6	52.9	67.1
KGM40	40	4.00	5.00	8.00	11.5	15	17.5	22	26.5	29.5	31.0	32.5	38	52.5	59.5	70.5	89.5
KGM50	50	5.00	6.23	9.81	14.8	19.8	22.9	27.6	33.2	37.0	39.0	40.9	46.3	61.3	68.9	78.2	91.8
KGM60	60	6.00	7.45	11.6	18.2	24.6	28.3	33.1	39.9	44.6	46.9	49.3	54.6	70.1	78.3	85.9	94.1
KGM70	70	7.00	8.69	13.6	21.2	28.7	33.0	38.6	46.5	52.0	54.7	57.5	63.7	81.8	91.4	100	110
KGM80	80	8.00	9.94	15.5	24.3	32.8	37.7	44.1	53.1	59.4	62.6	65.7	72.8	93.5	104	115	125
KGM100	100	10.0	12.4	19.4	30.3	41.0	47.2	55.2	66.4	74.0	78.0	82.1	91.0	117	131	143	157
KGM120	120	12.0	14.9	23.2	36.4	49.1	56.6	66.2	79.7	89.0	94.0	98.5	109	140	157	172	188
KGM150	150	15.0	18.6	29.1	45.5	61.4	70.7	82.7	99.6	111	117	123	136	175	196	215	235
KGM200	200	20.0	24.7	38.8	60.5	81.8	94.3	111	133	148	156	164	182	235	261	287	314
KGM250	250	25.0	31.0	48.5	75.6	102	118	138	166	185	195	205	228	293	327	359	392
KGM300	300	30.0	37.2	58.2	90.8	123	141	165	199	222	234	246	274	352	392	431	470
KGM350	350	35.0	43.4	67.9	106	143	165	193	232	260	273	287	319	410	457	503	549
KGM400	400	40.0	49.6	77.7	121	164	188	220	266	297	312	328	365	469	523	575	627
KGM500	500	50.0	62.0	97.1	151	205	235	275	332	371	390	410	456	586	653	718	784
KGM600	600	60.0	74.4	117	181	246	282	330	398	445	468	492	547	703	784	862	941

# \( \sum\_{\text{Electrical Properties}} \) KGM series



Discharge performance data after prolonged float charge of fully charged cell Available current under 20°C ±5°C Final voltage1.14V/cell

Madala	C <sub>5</sub>			ŀ	Hours	S					Min	utes			Se	econ	ds
Models	Αň	10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KGM30	30	3.00	3.75	5.63	7.50	9.00	10.1	12.8	15.4	18.0	19.0	19.9	23.3	31.1	36.4	43.5	56.6
KGM40	40	4.00	5.00	7.50	10.0	12.0	13.5	17.0	20.5	24.0	25.0	26.5	31.0	41.5	48.5	58.0	75.5
KGM50	50	4.91	6.10	9.43	13.2	15.3	16.8	20.0	24.2	28.0	29.0	30.9	36.0	47.3	53.0	61.2	74.4
KGM60	60	5.81	7.20	11.4	16.5	18.6	20.0	22.9	27.9	32.0	33.0	35.3	40.9	53.2	57.5	64.4	73.3
KGM70	70	6.78	8.40	13.3	19.2	21.7	23.4	26.8	32.5	37.0	39.0	41.2	47.8	62.0	67.1	75.2	85.5
KGM80	80	7.75	9.60	15.2	22.0	24.8	26.7	30.6	37.1	42.0	45.0	47.1	54.6	70.9	76.6	85.9	97.7
KGM100	100	9.68	12.0	19.0	27.5	31.0	33.4	38.2	46.4	53.0	56.0	58.8	68.2	88.6	95.8	107	122
KGM120	120	11.6	14.4	22.7	33.0	37.1	40.0	45.9	55.7	63.0	67.0	70.6	81.9	106	115	129	147
KGM150	150	14.5	18.0	28.4	41.2	46.4	50.1	57.3	69.6	79.0	84.0	88.3	102	133	144	161	183
KGM200	200	19.5	24.0	38.0	55.0	62.0	66.6	76.4	92.7	105	112	118	137	177	192	216	244
KGM250	250	24.3	30.0	47.5	68.8	77.2	83.5	95.6	116	131	139	147	170	222	240	269	306
KGM300	300	29.1	36.1	57.0	82.6	92.7	100	115	139	158	167	176	204	266	287	323	367
KGM350	350	34.0	42.1	66.5	96.3	108	117	134	162	184	195	206	238	310	335	376	428
KGM400	400	38.8	48.1	76.0	110	124	134	153	185	210	223	235	272	355	383	430	489
KGM500	500	48.5	60.1	95.0	138	154	167	191	231	263	278	294	340	443	479	538	611
KGM600	600	58.2	72.1	114	166	185	200	229	277	316	334	353	408	532	575	646	733

Data is only for the selection reference, without assessment.