

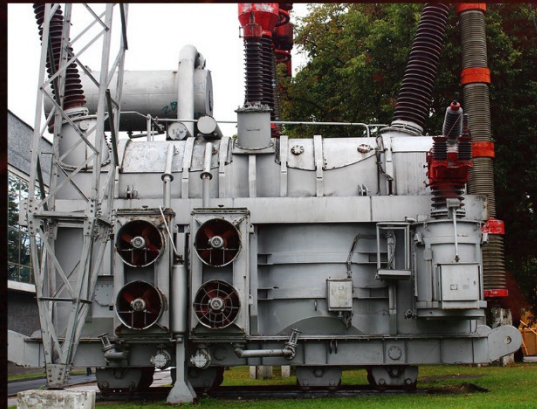
FUKUDA

2018

Pocket Type Nickel Cadmium Batteries

*Lower Maintenance
Complete Reliability*

*Excellent Performance
Exceptionally Long Life*



*Customized to your needs, **FUKUDA** technology surpasses its competitors in durability and convenience. Tap the energy.*

TECHNICAL SPECIFICATION OF **FUKUDA** KAP SERIES BATTERIES

Cell Type	Nominal Capacity C ₅ (Ah)	External Dimensions (mm)			Max Dry Weight (KG)	Max Wet Weight (KG)	Screw Thread of Terminal Poles	Container Material
		Width	Length	Height				
KAP 1	10	81	29	223	0.6	0.8	M6	PP
KAP 2	20	113	32	223	1.0	1.2	M6	PP
KAP 3	30	134	68	245	1.7	2.8	M10 x 1	PP
KAP 4	40	134	68	245	2.1	3.0	M10 x 1	PP
KAP 5	50	134	68	245	2.5	3.0	M10 x 1	PP
KAP 6	60	134	70	285	3.2	4.2	M16	PP
KAP 7	70	134	70	285	3.3	4.3	M16	PP
KAP 8	80	141	80	370	4.0	5.8	M10 x 1	PP
KAP 10	100	141	80	370	4.5	6.3	M10 x 1	PP
KAP 12	120	141	80	370	5.0	6.4	M10 x 1	PP
KAP 15	150	141	92	365	6.8	8.5	M16	PP
KAP 20	200	165	107	348	8.0	10.0	M20	PP
KAP 25	250	167	164	348	11.0	14.5	M20	PP
KAP 30	300	167	164	348	13.0	15.0	M20	PP
KAP 35	350	170	152	385	14.0	17.2	M20	PP
KAP 40	400	170	152	385	14.5	17.5	M20	PP
KAP 50	500	200	162	450	19.0	24.0	2 x M16	PP
KAP 60	600	291	176	510	27.0	38.0	2 x M20	ABS
KAP 70	700	291	176	510	29.0	39.0	2 x M20	ABS
KAP 80	800	398	186	570	39.0	59.0	3 x M20	ABS
KAP 90	900	398	186	570	41.0	60.0	3 x M20	ABS
KAP 100	1000	398	186	570	44.0	61.0	3 x M20	ABS
KAP 110	1100	398	186	570	45.0	62.0	3 x M20	ABS
KAP 120	1200	398	186	570	46.0	63.0	3 x M20	ABS

- Dimensions tolerance +/- 3mm. Weight tolerance +/- 0.2kg

This catalogue provides outline information only and is not deemed to form part of an offer or contract. Our policy is one of continued improvement and we reserve the right to change details without prior notice.



YOUR TRUSTED ENERGY SOLUTIONS PROVIDER



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DISCHARGE PERFORMANCE DATA

FUKUDA KAP SERIES BATTERY

Discharge performance data after fully charged by constant current according to IEC60623

Available current under 20°C 5°C

Final voltage 1.14 V/cell

Cell Type	C ₅ (Ah)	Hours							Minutes						Seconds		
		10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KAP 1	10	0.98	1.20	1.80	2.70	3.50	4.07	5.00	6.40	7.20	7.93	8.40	9.60	13.8	15.9	20.9	23.9
KAP 2	20	1.96	2.40	3.60	5.40	7.00	8.13	10.0	12.8	14.4	15.9	16.8	19.2	27.6	31.9	41.8	47.9
KAP 3	30	2.94	3.60	5.40	8.10	10.5	12.2	15.0	19.2	21.6	23.9	25.2	28.8	41.3	47.9	62.7	71.8
KAP 4	40	3.92	4.80	7.20	10.8	14.0	16.3	20.0	25.6	28.8	31.8	33.6	38.4	55.1	63.8	83.6	95.8
KAP 5	50	4.86	5.95	8.97	13.4	17.3	20.1	24.1	30.7	34.7	37.3	40.7	45.4	64.2	73.1	94.9	108
KAP 6	60	5.79	7.09	10.7	15.9	20.6	23.8	28.3	35.8	40.6	42.8	47.8	52.5	73.3	82.3	106	120
KAP 7	70	6.73	8.24	12.5	18.5	23.9	27.6	32.4	40.9	46.5	48.3	54.9	59.5	82.4	91.6	117	133
KAP 8	80	7.73	9.46	14.3	21.0	26.9	31.0	36.3	45.9	51.4	53.5	61.0	67.2	90.9	100	127	143
KAP 10	100	9.74	11.9	17.9	26.1	33.1	38.1	44.7	56.7	62.2	65.5	74.2	84.0	111	122	154	171
KAP 12	120	11.6	14.2	21.5	31.5	40.1	46.3	54.3	68.7	76.4	79.7	90.9	101	135	149	189	210
KAP 15	150	14.7	18.0	27.0	39.0	48.7	56.0	66.0	84.1	90.0	95.9	108	126	163	178	221	241
KAP 20	200	19.6	24.0	36.0	52.0	65.0	74.7	87.9	112	120	128	144	168	216	238	294	322
KAP 25	250	24.5	30.0	45.0	65.0	81.3	93.5	110	140	150	160	180	210	271	297	368	401
KAP 30	300	29.5	36.0	54.0	78.0	97.7	112	132	168	180	192	216	252	325	357	442	483
KAP 35	350	34.4	42.0	63.0	91.0	114	131	154	196	210	224	252	294	379	416	516	566
KAP 40	400	39.2	48.0	72.0	104	130	149	176	224	240	256	288	336	433	475	589	646
KAP 50	500	49.0	60.0	90.0	130	163	186	220	280	300	320	360	420	541	594	736	809
KAP 60	600	58.8	72.0	108	156	195	224	264	336	360	384	432	504	650	713	884	970
KAP 70	700	68.6	84.0	126	182	228	261	308	392	420	448	504	588	758	831	1031	1135
KAP 80	800	78.4	96.0	144	208	260	299	352	448	480	512	576	672	866	950	1178	1299
KAP 90	900	88.2	108	162	234	293	336	396	504	540	576	648	756	975	1069	1325	1460
KAP 100	1000	98.0	120	180	260	325	373	440	560	600	640	720	840	1083	1187	1473	1625
KAP 110	1100	108	132	198	286	358	411	484	616	660	704	792	924	1191	1306	1620	1789
KAP 120	1200	118	144	216	312	390	448	528	672	720	768	864	1008	1300	1425	1767	1952

The discharge data listed above are for battery sizing reference only, not to be regarded as battery acceptance standards.

DISCHARGE PERFORMANCE DATA

FUKUDA KAP SERIES BATTERY

Discharge performance data after fully charged by constant current according to IEC60623

Available current under 20°C 5°C

Final voltage 1.10 V/cell

Cell Type	C ₅ (Ah)	Hours							Minutes							Seconds		
		10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1	
KAP 1	10	1.00	1.24	1.92	2.93	3.95	4.73	5.80	7.60	8.53	9.20	10.5	12.6	16.1	18.5	24.2	27.5	
KAP 2	20	2.00	2.48	3.84	5.87	7.92	9.47	11.6	15.2	17.1	18.4	21.0	25.2	32.3	37.1	48.4	55.1	
KAP 3	30	3.00	3.71	5.76	8.80	11.9	14.2	17.4	22.8	25.7	27.6	31.5	37.8	48.5	55.6	72.7	82.7	
KAP 4	40	3.98	4.93	7.66	11.7	15.8	18.7	22.9	29.4	33.0	34.8	39.5	47.4	60.4	68.6	88.3	100	
KAP 5	50	4.97	6.15	9.56	14.7	19.6	23.2	28.3	36.0	40.3	42.0	47.5	57.0	72.3	81.6	104	117	
KAP 6	60	5.95	7.36	11.5	17.6	23.5	27.7	33.8	42.6	47.6	49.2	55.5	66.6	84.2	94.5	120	134	
KAP 7	70	6.94	8.58	13.4	20.5	27.4	32.2	39.3	49.2	54.9	56.4	63.5	76.2	96.1	108	135	151	
KAP 8	80	7.93	9.81	15.2	23.5	31.2	36.8	44.8	56.0	62.4	64.0	72.0	86.4	109	122	152	171	
KAP 10	100	9.91	12.3	19.0	29.4	39.0	46.0	56.0	70.0	78.0	80.0	90.0	108	136	152	190	214	
KAP 12	120	11.9	14.8	22.9	34.9	46.3	54.3	66.3	82.1	90.9	96.0	108	124	159	176	218	243	
KAP 15	150	15.0	18.5	28.8	43.0	57.0	66.0	81.0	99.0	108	120	135	144	191	208	254	278	
KAP 20	200	20.0	24.8	38.4	57.3	76.0	87.9	108	132	144	160	180	192	255	277	338	370	
KAP 25	250	25.0	31.0	48.0	71.6	95.1	110	135	165	180	200	225	240	318	347	423	463	
KAP 30	300	30.0	37.1	57.6	86.0	114	132	162	198	216	240	270	288	382	416	508	556	
KAP 35	350	35.0	43.3	67.2	100	133	154	189	231	252	280	316	336	446	486	592	648	
KAP 40	400	40.0	49.5	76.8	115	152	176	216	264	288	320	361	384	509	555	677	741	
KAP 50	500	50.0	61.9	96.3	144	190	220	270	330	360	400	450	480	636	694	846	926	
KAP 60	600	60.0	74.3	115	172	228	264	324	396	432	480	540	576	764	832	1015	1112	
KAP 70	700	70.0	86.6	134	201	266	308	378	462	504	560	630	672	891	971	1184	1297	
KAP 80	800	80.0	99.0	153	230	304	352	432	528	576	640	720	768	1018	1110	1353	1482	
KAP 90	900	90.0	112	172	258	342	396	486	594	648	720	810	864	1146	1248	1522	1668	
KAP 100	1000	100	123	192	286	381	440	541	661	720	800	901	960	1274	1387	1691	1853	
KAP 110	1100	110	136	211	315	418	484	594	726	792	880	990	1056	1400	1526	1860	2038	
KAP 120	1200	120	149	230	344	456	528	648	792	864	960	1080	1152	1528	1664	2029	2223	

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DISCHARGE PERFORMANCE DATA

FUKUDA KAP SERIES BATTERY

Discharge performance data after fully charged by constant current according to IEC60623

Available current under 20°C 5°C

Final voltage 1.05 V/cell

Cell Type	C _s (Ah)	Hours							Minutes						Seconds		
		10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KAP 1	10	1.02	1.26	1.96	3.10	4.33	5.27	6.87	9.20	10.8	11.8	13.2	14.4	19.5	21.9	28.5	32.1
KAP 2	20	2.03	2.52	3.92	6.22	8.64	10.5	13.5	17.9	20.9	22.8	25.3	28.1	37.1	41.5	53.8	60.2
KAP 3	30	3.03	3.77	5.89	9.36	12.9	15.7	19.8	26.2	30.4	32.9	36.4	41.1	53.0	59.0	75.7	84.3
KAP 4	40	4.02	5.02	7.85	12.5	17.2	20.9	26.1	34.5	39.8	43.0	47.5	54.1	68.9	76.5	97.6	108
KAP 5	50	5.02	6.28	9.8	15.6	21.5	26.1	32.4	42.8	49.3	53.2	58.6	67.1	84.8	94.0	120	132
KAP 6	60	6.02	7.53	11.8	18.8	25.8	31.3	38.8	51.0	58.7	63.3	69.6	80.1	101	112	141	157
KAP 7	70	7.01	8.79	13.7	21.9	30.1	36.4	45.1	59.3	68.2	73.5	80.7	93.0	117	129	163	181
KAP 8	80	8.01	10.0	15.7	25.1	34.4	41.6	51.4	67.6	77.6	83.6	91.8	106	132	147	185	205
KAP 10	100	10.0	12.5	19.6	31.4	43.0	52.0	64.1	84.1	96.5	104	114	132	164	182	229	253
KAP 12	120	12.0	15.1	23.6	37.6	51.5	62.2	76.6	101	115	123	135	158	194	215	269	296
KAP 15	150	15.2	18.9	29.6	46.8	64.2	77.0	95.3	125	141	150	167	198	238	262	323	354
KAP 20	200	20.4	25.3	39.6	62.2	85.3	102	126	165	186	196	219	264	310	340	414	451
KAP 25	250	25.6	31.7	49.6	77.6	106	127	157	206	230	241	271	330	382	418	504	548
KAP 30	300	30.7	38.1	59.5	93.1	128	152	189	246	275	288	324	396	456	499	599	650
KAP 35	350	35.8	44.5	69.4	109	149	177	220	287	321	336	378	462	532	582	698	758
KAP 40	400	40.9	50.9	79.3	124	170	203	252	328	366	384	432	528	608	665	798	867
KAP 50	500	51.0	63.5	99.0	156	213	254	315	410	458	480	540	660	760	831	997	1083
KAP 60	600	61.2	76.1	119	186	255	304	378	492	549	576	648	792	912	997	1197	1299
KAP 70	700	71.4	88.7	138	217	298	355	441	574	640	672	756	924	1064	1164	1396	1516
KAP 80	800	81.6	101	158	248	341	406	504	657	732	768	863	1057	1217	1330	1596	1733
KAP 90	900	91.7	114	178	279	383	456	567	738	823	864	972	1188	1368	1496	1796	1949
KAP 100	1000	102	127	198	310	425	507	630	820	915	960	1080	1320	1520	1663	1995	2166
KAP 110	1100	112	139	218	341	468	558	693	902	1006	1056	1188	1452	1672	1829	2194	2382
KAP 120	1200	122	152	238	372	510	608	756	984	1098	1152	1296	1584	1824	1995	2394	2599

The discharge data listed above are for battery sizing reference only, not to be regarded as battery acceptance standards.

DISCHARGE PERFORMANCE DATA

FUKUDA KAP SERIES BATTERY

Discharge performance data after fully charged by constant current according to IEC60623

Available current under 20°C 5°C

Final voltage 1.00 V/cell

Cell Type	C ₅ (Ah)	Hours							Minutes						Seconds		
		10	8	5	3	2	1.5	1	30	20	15	10	5	1	30	5	1
KAP 1	10	1.03	1.27	2.00	3.20	4.55	5.73	7.60	10.8	12.5	13.6	15.0	18.0	22.3	25.1	32.3	36.4
KAP 2	20	2.05	2.55	4.00	6.40	9.08	11.4	14.9	21.0	24.2	26.3	29.0	34.0	42.0	46.7	59.3	66.1
KAP 3	30	3.07	3.83	6.00	9.6	13.6	16.9	22.0	30.6	35.1	38.1	42.0	48.0	58.9	65.0	81.0	89.2
KAP 4	40	4.09	5.11	8.00	12.8	18.1	22.4	29.0	40.2	46.0	49.9	55.0	62.0	75.8	83.3	103	112
KAP 5	50	5.11	6.39	10.0	16.0	22.6	27.9	36.0	49.7	56.9	61.7	68.0	76.0	92.7	102	124	135
KAP 6	60	6.13	7.67	12.0	19.2	27.1	33.4	43.1	59.3	67.8	73.5	81.0	90.0	110	120	146	158
KAP 7	70	7.15	8.95	14.0	22.4	31.6	39.0	50.1	68.9	78.7	85.3	94.0	104	127	138	168	182
KAP 8	80	8.17	10.2	16.0	25.6	36.1	44.5	57.2	78.5	89.6	97.1	107	118	143	156	189	205
KAP 10	100	10.2	12.8	20.0	32.0	45.1	55.5	71.2	97.6	111	121	133	146	177	193	232	251
KAP 12	120	12.3	15.4	24.0	38.4	54.1	66.6	85.3	117	133	144	159	174	211	230	276	297
KAP 15	150	15.4	19.2	30.0	48.0	67.5	83.0	107	146	166	180	198	216	262	285	342	368
KAP 20	200	20.6	25.5	40.0	64.0	89.9	111	142	194	222	240	264	288	350	380	456	490
KAP 25	250	25.8	31.9	50.0	80.0	112	138	178	242	277	300	330	360	437	475	570	613
KAP 30	300	30.9	38.2	60.0	96.0	135	166	213	291	333	360	396	432	524	570	684	736
KAP 35	350	36.1	44.6	70.0	112	157	194	249	339	389	420	462	504	612	665	798	858
KAP 40	400	41.2	51.0	80.0	128	180	221	284	388	444	480	528	576	699	760	912	981
KAP 50	500	51.5	63.7	100	160	225	276	355	485	555	600	660	720	874	950	1140	1226
KAP 60	600	61.8	76.5	120	192	270	332	426	582	666	720	792	864	1048	1140	1368	1471
KAP 70	700	72.1	89.3	140	224	315	387	497	679	777	840	924	1008	1223	1330	1596	1716
KAP 80	800	82.4	102	160	256	360	443	568	776	888	960	1056	1152	1398	1520	1824	1961
KAP 90	900	92.7	115	180	288	405	498	639	873	999	1080	1188	1296	1573	1710	2052	2206
KAP 100	1000	103	128	200	320	450	554	710	970	1110	1200	1320	1440	1748	1901	2280	2451
KAP 110	1100	114	140	220	352	495	609	781	1067	1221	1320	1452	1584	1923	2090	2508	2696
KAP 120	1200	124	153	240	384	540	664	852	1164	1332	1440	1584	1728	2098	2280	2736	2941