

# NICKEL CADMIUM

## KP SERIES



KP Series battery incorporate pocket and sintered plate technology designed for switchgear tripping, UPS and engine starting with 15-20 years design life at 25°C

### APPLICABLE FIELDS

- Switch Gear Tripping
- Uninterrupted power supply (UPS)
- Engine Starting
- Alarm and security system
- DC power supply



### PRODUCT FEATURES

- Good low temperature performance
- Good load performance: forgiving if abused
- Rugged, high cycle count with proper maintenance
- Only battery that can be ultra-fast charged with little stress
- Long shelf life: can be stored in a discharged state, needs priming before use
- Economically priced: NiCd is the lowest in terms of cost per cycle
- Design according with IEC 60623 and EN60623

### TECHNICAL SPECIFICATIONS

Cell type	Floating charge	Equalizing charge
KPL	1.48-1.50	1.55-1.60
KPM	1.42-1.45	1.55-1.60
KPH	1.42-1.45	1.55-1.60

- Conditions of installation area:
- Avoid direct sunlight
  - Avoid gasses and dust
  - No vibration and low humidity
  - Keep temperature below 40°C

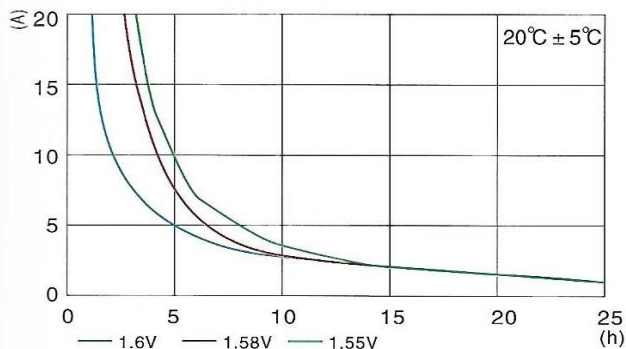
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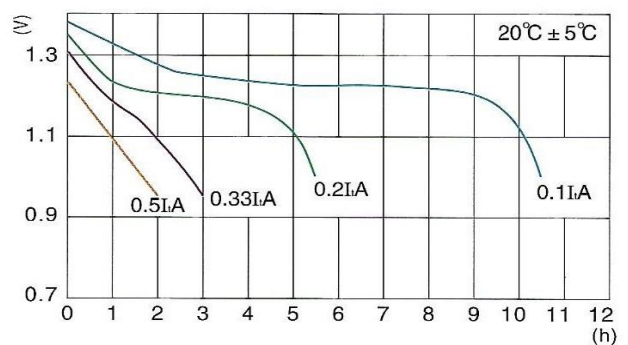


KPL (LOW RATE TYPE)							
Cell Type	Nominal Capacity (AH)	Maximum Dimension (mm)			Cell Weight (kg)	Electrolyte Volume (L)	Screws of Terminals
		Length (L)	Width (W)	Height (H)			
KPL10	10	85	39	126	0.66	0.12	M5
KPL20	20	144	53	246	1.80	0.72	M5
KPL22	22	128	34	216	1.78	0.40	M5
KPL40	40	144	53	246	2.70	0.60	M10 x 1
KPL45	45	128	55	216	2.78	0.45	M5
KPL50	50	142	57	229	3.20	0.70	M10 x 1
KPL60	60	135	51	368	3.90	1.00	M10 x 1
KPL 80	80	139	79	362	6.50	1.70	M16
KPL100	100	139	79	360	6.50	1.70	M16
KPL150	150	167	162	343	13.00	3.30	M20 x 1.5
KPL200	200	167	162	343	14.00	3.30	M20 x 1.5
KPL250	250	174	161	557	17.00	4.00	M20 x 1.5
KPL300	300	176	161	540	22.80	4.00	M20 x 1.5
KPL350	350	176	161	535	23.00	4.00	M20 x 1.5
KPL400	400	176	161	535	25.00	4.20	M20 x 1.5
KPL600	600	291	174	506	50.00	6.00	M20 x 1.5
KPL800	800	398	184	562	63.00	18.00	M20 x 1.5
KPL1000	1000	398	184	560	73.00	18.30	M20 x 1.5
KPL1100	1100	398	184	560	74.50	19.00	M20 x 1.5
KPL1200	1200	398	184	560	75.00	19.50	M20 x 1.5

Constant voltage charge A-h curves of low discharge rate Ni-cd battery



Discharge curves of low discharge rate Ni-cd battery



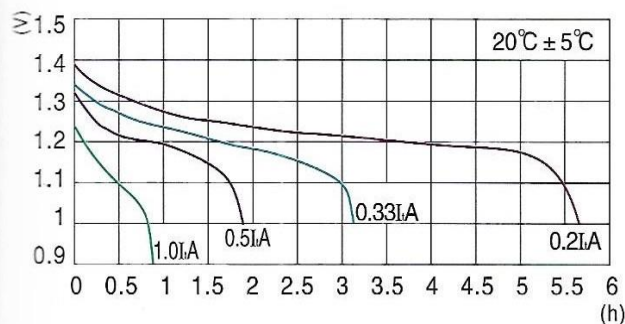
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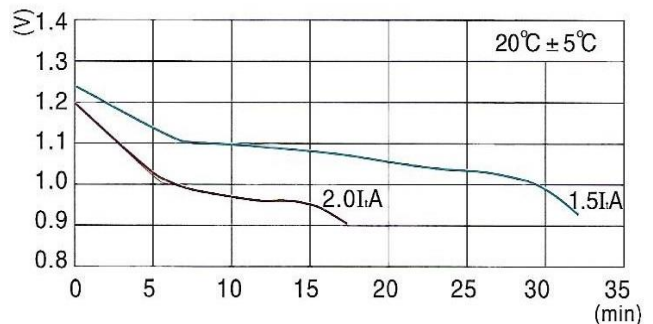


KPM (MEDIUM RATE TYPE)							
Cell Type	Nominal Capacity (AH)	Maximum Dimension (mm)			Cell Weight (kg)	Electrolyte Volume (L)	Screws of Terminals
		Length (L)	Width (W)	Height (H)			
KPM20	20	142	66	227	3.50	1.10	M10 x 1
KPM30	30	142	66	227	3.50	1.00	M10 x 1
KPM40	40	139	79	291	5.00	1.50	M16
KPM50	50	139	79	291	5.00	1.30	M16
KPM60	60	138	78	290	5.50	1.30	M16
KPM75	75	139	79	361	6.50	1.67	M16
KPM80	80	139	79	361	6.50	1.60	M16
KPM85	85	165	105	350	9.30	2.00	M20 x 1.5
KPM100	100	165	105	350	9.30	1.75	M20 x 1.5
KPM120	120	167	162	343	12.50	2.92	M20 x 1.5
KPM150	150	167	162	343	13.50	3.08	M20 x 1.5
KPM200	200	284	172	348	24.50	5.83	M20 x 1.5
KPM250	250	284	172	348	26.00	5.83	M20 x 1.5
KPM300	300	176	161	540	23.00	4.17	M20 x 1.5
KPM400	400	291	174	501	36.00	8.10	M20 x 1.5
KPM500	500	291	174	501	39.00	7.50	M20 x 1.5
KPM600	600	397	183	564	44.00	47.00	M20 x 1.5
KPM700	700	397	183	564	49.00	46.00	M20 x 1.5
KPM800	800	397	183	564	66.00	15.00	M20 x 1.5

Discharge curves of medium discharge rate Ni-cd battery



Discharge curves of medium discharge rate Ni-cd battery



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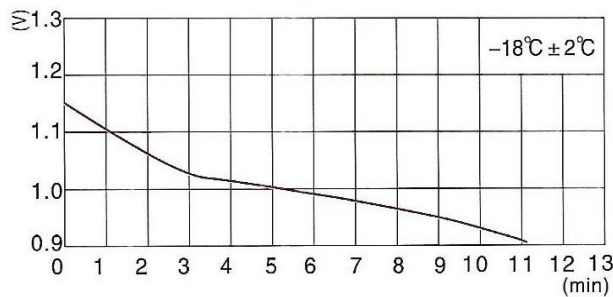
## KP SERIES



### KPH (HIGH RATE TYPE)

Cell Type	Nominal Capacity (AH)	Maximum Dimension (mm)			Cell Weight (kg)	Electrolyte Volume (L)	Screws of Terminals
		Length (L)	Width (W)	Height (H)			
KPH20	20	139	79	291	5.00	1.50	M16
KPH30	30	139	79	291	5.00	1.40	M16
KPH40	40	139	79	361	6.50	1.72	M16
KPH50	50	139	79	361	6.50	1.70	M16
KPH60	60	165	105	350	9.30	1.85	M20 x 1.5
KPH70	70	165	105	350	9.30	1.80	M20 x 1.5
KPH80	80	165	105	350	9.30	1.75	M20 x 1.5
KPH100	100	167	162	343	13.50	3.10	M20 x 1.5
KPH120	120	167	162	343	13.50	3.08	M20 x 1.5
KPH150	150	284	174	348	24.50	5.83	M20 x 1.5
KPH200	200	291	174	501	39.00	8.50	M20 x 1.5
KPH250	250	291	174	501	39.00	8.00	M20 x 1.5
KPH300	300	291	174	501	39.00	7.50	M20 x 1.5
KPH400	400	397	183	564	66.00	16.00	M20 x 1.5
KPH500	500	397	183	564	66.00	15.00	M20 x 1.5

2IA discharge curve of high discharge rate Ni-cd battery at low temperature



1IA discharge curve of high discharge rate Ni-cd battery at low temperature



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