

VARTA

Portable and Micro Batteries Type Range



40 107 ex/0589

Ni-Cd Cylindrical Cells



Cylindrical cell battery of 6 cells with solder tags.

Standard — Series RS for Normal Rates of Discharge up to 6 CA (60 I₁₀)

Type	Order-No. for bare cell in shrink sleeve	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						∅	H	
150 RS*	05001 201 052	150 mAh	30 mA	15 mA	9	12 ^{-0.5}	29 ⁻¹	Alls cells available in different configurations with welded tags besides 150 RS, 180 RS and 501 RS)
180 RS*	05003 201 052	200 mAh	36 mA	18 mA	10	10.5 ⁻¹	44 ⁻¹	
500 RS	50150 201 052	500 mAh	100 mA	50 mA	24	14.5 ^{-0.5}	49.5 ⁻¹	
501 RS*	05006 201 052	500 mAh	100 mA	50 mA	24	14.5 ^{-0.5}	50.3 ^{-0.5}	
800 RS	50180 201 052	800 mAh	160 mA	80 mA	37	max. 17.3	max. 49.2	
RS 2	50220 201 052	2 Ah	400 mA	200 mA	92	34.0 ⁻²	37.5 ⁻²	

* Primary interchangeable cells.

High current — Series RSH

for Higher Rates of Discharge up to 10 CA (100 I₁₀)

Type	Order-No. for bare cell in shrink sleeve	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						∅	H	
750 RSH	50375 201 052	750 mAh	150 mA	75 mA	36	25.3 ^{-0.5}	25 ⁻¹	In future replaced RSH 1.2
RSH 1	50210 201 052	1 Ah	200 mA	100 mA	46	23 ⁻¹	35.7 ⁻¹	
RSH 1.2	50412 201 052	1.2 Ah	240 mA	120 mA	50	23 ⁻¹	42.2 ⁻¹	
RSH 1.4	50414 201 052	1.4 Ah	280 mA	140 mA	50	23 ⁻¹	42.2 ⁻¹	
RSH 1.8*	05014 101 052	1.8 Ah	360 mA	180 mA	67	26 ⁻¹	49 ⁻¹	
RSH 4*	05020 101 052	4 Ah	800 mA	400 mA	147	33.5 ⁻¹	61 ⁻¹	
RSH 7	50470 201 052	7 Ah	1.4 A	700 mA	237	33.5 ⁻¹	94 ⁻¹	

* Primary interchangeable cells.

Increased Volume Capacity — Series RSE

Type	Order-No. for bare cell in shrink sleeve	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						∅	H	
250 RSE	50925 201 052	250 mAh	50 mA	25 mA	11.3	14.7 ^{-0.5}	25 ⁻¹	** Type under development
520 RSE	50952 201 052	500 mAh	100 mA	50 mA	19	17.2 ^{-0.5}	28 ⁻¹	
600 RSE	50960 201 052	600 mAh	120 mA	60 mA	24	14.7 ^{-0.5}	49.5 ⁻¹	
RSE 2.1**	n. n.	2.1 Ah	420 mA	210 mA	70	26.0 ⁻¹	49.0 ⁻¹	

High Temperature — Series RST for Temperatures up to +75 °C

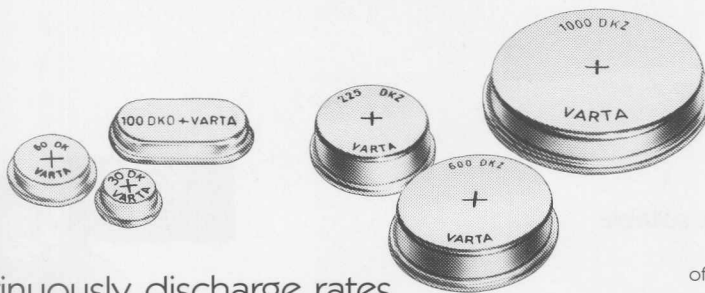
Type	Order-No. for bare cell in shrink sleeve	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						∅	H	
100 RST	50710 201 052	90 mAh	18 mA	9 mA	8	14.3 ^{-0.6}	16.8 ^{-0.6}	Discharge rates like standard RS-types
225 RST	50722 201 052	250 mAh	50 mA	25 mA	14	14.2 ^{-0.2}	29.8 ^{-0.3}	
500 RST	50750 201 052	500 mAh	90 mA	45 mA	24	14.5 ^{-0.5}	49.5 ⁻¹	
RST 1.2	50812 201 052	1.2 Ah	240 mA	120 mA	50	23 ⁻¹	42.2 ⁻¹	
RST 1.8	05814 201 052	1.8 Ah	360 mA	180 mA	67	26 ⁻¹	49 ⁻¹	
RST 4	05820 201 052	4 Ah	800 mA	400 mA	147	33.5 ⁻¹	61 ⁻¹	
RST 6.5	50870 201 052	6.5 Ah	1.3 A	650 mA	237	33.5 ⁻¹	94 ⁻¹	

Quick Charge — Series RSQ

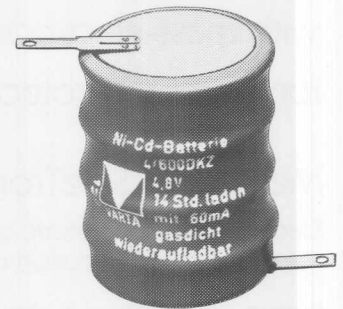
Typ	Bestell-Nr.	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						∅	H	
600 RSQ*	50560 201 052	0.6 Ah	120 mA	60 mA	25	14.7 ^{-0.5}	49.5 ⁻¹	* deliveries upon request
900 RSQ*	50590 201 052	0.9 Ah	180 mA	90 mA	34	17.2 ^{-0.3}	48.7 ⁻¹	
RSQ 1.2	50612 201 052	1.2 Ah	240 mA	120 mA	52	23.0 ⁻¹	42.2 ⁻¹	
RSQ 4*	05120 201 052	4 Ah	800 mA	400 mA	165	33.5 ⁻¹	58.0 ⁻¹	

Sealed Ni-Cd-button cells

with mass plate electrodes



Button cell battery of 5 cells in shrink sleeve with press contact



Button cell battery of 4 cells in shrink sleeve with solder tags

for continuously discharge rates

Type up to 2 CA	Order-No. for bare cells without solder tags	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						φ	H	
4 DK*	53204 101 000	4 mAh	0.8 mA	0.4 mA	0.6	9.5 ^{-0.1}	2.1 ^{-0.05}	Alls cells available in different configurations with welded tags 100 DKO + 40 DKO has oval shape with dimensions 40 DKO L = 26.6 ^{-0.2} mm W = 14 ^{-0.2} mm 100 DKO L = 25.6 ^{-0.2} mm W = 14 ^{-0.2} mm
11 DK*	53001 101 000	11 mAh	2.2 mA	1.1 mA	1.2	11.55 ^{-0.1}	3.1 ^{-0.2}	
30 DK*	05675 101 111	30 mAh	6 mA	3 mA	1.4	11.5 ^{-0.2}	5.35 ^{-0.3}	
40 DKO	53004 101 000	40 mAh	8 mA	4 mA	3.7	oval	3.2 ^{-0.2}	
60 DK*	05625 101 111	60 mAh	12 mA	6 mA	3.4	15.5 ^{-0.1}	6.0 ^{-0.4}	
100 DKO	53010 101 000	100 mAh	20 mA	10 mA	5.5	oval	5.9 ^{-0.25}	
140 DK	53014 101 000	140 mAh	28 mA	14 mA	10.0	25.1 ^{-0.15}	6.1 ^{-0.6}	
170 DK	53017 101 000	170 mAh	34 mA	17 mA	9.2	25.1 ^{-0.15}	6.7 ^{-0.6}	
250 DK	53025 101 000	250 mAh	50 mA	25 mA	11.8	25.1 ^{-0.15}	8.8 ^{-0.6}	
280 DK	53028 101 000	280 mAh	56 mA	28 mA	15.7	34.35 ^{-0.05}	5.3 ^{-0.4}	
600 DK	53060 101 000	600 mAh	120 mA	60 mA	33.3	43.1 ^{-0.2}	7.9 ^{-0.8}	

for high loads (with twin electrodes)

Type up to 3 CA	Order-No. for bare cells without solder tags	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						φ	H	
225 DKZ	53522 101 000	225 mAh	44 mA	22 mA	12.0	25.1 ^{-0.15}	9.1 ^{-0.8}	Available in different configurations with welded tags
600 DKZ	53560 101 000	600 mAh	120 mA	60 mA	28.0	34.4 ^{-0.2}	10.0 ⁻¹	
1000 DKZ	53610 101 000	1000 mAh	200 mA	100 mA	57.0	50.3 ^{-0.2}	10.0 ⁻¹	

for high temperatures (up to +65 °C)

Type	Order-No. for bare cells without solder tags	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						φ	H	
8 DKT	53908 101 000	8 mAh	1.6 mA	0.8 mA	1.2	11.5 ^{-0.1}	3.1 ^{-0.2}	
40 DKT	53704 101 000	40 mAh	8 mA	4 mA	3.4	15.5 ^{-0.1}	6.0 ^{-0.2}	

for high overcharge performance (Type V...R)

Type	Order-No. for bare cells without solder tags	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)		Remarks
						φ	H	
V 4 R	n. n.	4 mAh	0.8 mA	0.4 mA	0.6	9.5 ^{-0.1}	2.1 ^{-0.5}] Types in preparation V 100 R: L = 26.6 ^{-0.2} W = 14.1 ^{-0.2}
V 11 R	n. n.	11 mAh	2.2 mA	1.1 mA	1.2	11.55 ^{-0.1}	3.1 ^{-0.2}	
V 60 R	53306 101 000	60 mAh	12 mA	6 mA	4.0	15.5 ^{-0.1}	6.0 ^{-0.1}	
V 100 R	53310 101 000	100 mAh	20 mA	10 mA	6.0	oval	5.9 ^{-0.25}	
V 170 R	53317 101 000	170 mAh	34 mA	17 mA	10.0	25.1 ^{-0.15}	6.7 ^{-0.6}	
V 280 R	53328 101 000	280 mAh	56 mA	28 mA	12.0	25.1 ^{-0.15}	8.8 ^{-0.6}	

Following types are recognized under **UL-Nr. 14 209 (N)**:

60 DK, 100 DKO, 170 DK, 250 DK, Tr 7/8, V 60 R, V 100 R, V 170 R, V 280 R, V 6/8 R, V 7/8 R

For all DK-button cells:

recommended trickle charge = 0.01 CA up to max. 0.03 CA
permissible overcharge DKZ-cells: 100 h max. 0.1 CA

For all VR-cells:

recommended trickle charge = 0.03 CA
max. permissible trickle charge = up to 0.05 CA
permissible overcharge max. 0.1 CA unlimited at room temperature 22° ± 2 °C
0.2 CA max. 1 year at 22° ± 2 °C

* Primary interchangeable cells

Ni-Cd-button cell batteries

with mass-electrodes

for memory protection

Mempac / SafeTronic / Flat-Pack

Electrical data and trickle charge currents same as for all DK-button cells.

Button cell batteries in the charged state are suitable for wave soldering ($t_{\max.} = 10 \text{ sec.}$)



Series Mempac S

Number of cells Type	Order-No.	Nominal voltage V	Nominal capacity (mAh)	Length B (mm)	Width A (mm)	Height W.O. pins C (mm)	Weight approx. g
100 DKO	53010 701 012	1.2	100	17 -0.4	42.4-0.6	10.5-1	9
2/100 DKO	53010 702 012	2.4	100	17 -0.4	42.4-0.6	16.0-1	15
3/11 DK	53001 703 012	3.6	11	17 -0.4	42.4-0.6	7.5-1	7
3/30 DK	05675 703 012	3.6	30	17 -0.4	42.4-0.6	10.5-1	8
3/100 DKO	53010 703 012	3.6	100	22.2-0.4	40.3-0.6	16.0-1	21
4/100 DKO	53010 704 012	4.8	100	30.0-0.4	40.0-0.3	16.0-0.5	26

Series Mempac F

Number of cells Type	Order-No.	Nominal voltage V	Nominal capacity (mAh)	Length B (mm)	Width A (mm)	Height W.O. pins C (mm)	Weight approx. g
2/60 DK	05625 702 012	2.4	60	37.0-0.3	20.0-0.3	10.5-1	10
3/60 DK	05625 703 012	3.6	60	55.0-0.3	20.0-0.3	10.0-1	15

Series SafeTronic

Number of cells Type	Order-No.	Nominal voltage V	Nominal capacity (mAh)	Length B (mm)	Width A (mm)	Height W.O. pins C (mm)	Weight approx. g
100 DKO	53010 701 013	1.2	100	29.5-0.3	10.0-0.3	19.0-0.5	9
2/100 DKO	53010 702 013	2.4	100	29.5-0.3	16.0-0.3	19.0-0.5	14
3/100 DKO	53010 703 013	3.6	100	30.5-0.3	23.5-0.3	19.0-0.5	22
4/100 DKO	53010 704 013	4.8	100	30.5-0.3	29.0-0.3	19.0-0.5	28

Series Mempac S – T, Mempac F – T and SafeTronic T (for temp. up to +65 °C)

	Number of cells Type	Order-No.	Nominal voltage V	Nominal capacity (mAh)	Width B (mm)	Length A (mm)	Height W.O. pins C (mm)	Weight approx. g
S – T	2/80 DKO T	53708 702 012	2.4	80	17.0 - 0.4	42.4 - 0.6	16.0 - 1	15
	3/80 DKO T	53708 703 012	3.6	80	22.2 - 0.4	40.3 - 0.6	16.0 - 1	21
F – T	2/40 DK T	53704 702 012	2.4	40	20.0 - 0.3	37.0 - 0.3	10.0 - 1	10
	3/40 DK T	53704 703 012	3.6	40	20.0 - 0.3	55.0 - 0.3	10.0 - 1	15
SafeTronic – T	2/80 DKO T	53708 702 013	2.4	80	29.5 - 0.3	16.0 - 0.3	19.0 - 0.5	15
	3/80 DKO T	53708 703 013	3.6	80	30.5 - 0.3	23.5 - 0.3	19.0 - 0.5	25

Series Flat-Pack

Battery Type	Order-No.	Nominal voltage V	Length mm	Weight g
FL 2/40 DKT	53704 402 059	2.4	36.5	9.5
FL 3/40 DKT	53704 403 059	3.6	53.0	12.5
FL 4/40 DKT	53704 404 059	4.8	69.5 \pm 0.5	16.0
FL 5/40 DKT	53704 405 059	6.0	86.0	19.5
FL 2/60 DK	05625 402 059	2.4	36.5	9.0
FL 3/60 DK	05625 403 059	3.6	53.0	12.5
FL 4/60 DK	05625 404 059	4.8	69.5 \pm 0.5	16.0
FL 5/60 DK	05625 405 059	6.0	86.0	19.5

Battery Type	Order-No.	Nominal voltage V	Length mm	Weight g
FL 2/170 DK	53017 402 059	2.4	55.5	23.0
FL 3/170 DK	53017 403 059	3.6	81.5	33.5
FL 4/170 DK	53017 404 059	4.8	107.5 \pm 0.5	44.5
FL 5/170 DK	53017 405 059	6.0	133.5	55.0
FL 2/250 DK	53025 402 059	2.4	55.5	27.5
FL 3/250 DK	53025 403 059	3.6	81.5	41.0
FL 4/250 DK	53025 404 059	4.8	107.5 \pm 0.5	54.5
FL 5/250 DK	53025 405 059	6.0	133.5	68.0

Ni-Cd button cell batteries



with mass plate electrodes in plastic encapsulation

Type	Order-No.	Nominal voltage V	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)			Remarks
							L	W	H	
Tr 7/8* 10/250DK	05022 101 052 53025 710 057	9.0 12.0	100 mAh 250 mAh	20.0 mA 50.0 mA	10 mA 25 mA	45 135	26.5 ^{-0.5} 54.8 ^{-0.6}	15.7 ^{-0.7} 28.8 ^{-0.6}	48.5 ⁻¹ 54.7 ⁻¹	Height incl. press studs

* Primary interchangeable battery.

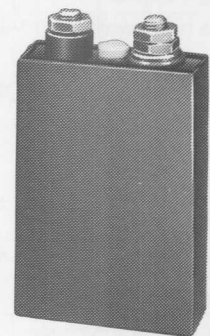
6 V-Batteries with sintered electrodes



in plastic housing
for continuous
discharge rates up to 1 CA (10 I₁₀)

Type	Order-No.	Nominal voltage V	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charge current 14 hours	Weight g	Dimensions (mm)			Remarks
							L	W	H	
5 M 3 5 M 6	52530 101 063 52560 101 063	6 6	3 Ah 6 Ah	600 mA 1200 mA	300 mA 600 mA	550 1000	134.5 ⁻¹ 90.5 ⁻¹	34.3 ^{-0.5} 50.5 ^{-0.5}	62.2 ^{-1.5} 112.5 ^{-1.5}	with AMP-connectors

Ni-Cd rectangular cells



with sintered electrodes
for continuous discharge rates up to 4 CA (40 I₁₀)

Type	Order-No.	Nominal voltage V	Nominal capacity at 0.2 CA	Discharge current 0.2 CA	Charging current 14 hours	Weight g	Dimensions (mm)			Remarks
							L	W	H*	
SD 15	52115 101 000	1.2	15 Ah	3.50 A	1.50 A	780	30 ⁻¹	77 ⁻¹	126 ⁻²	2 screw terminals

* Height incl. terminals.

Maintenance-free Lead Acid Batteries

Rectangular cells in plastic housing
for cyclic- and float operation

Series "accu-CF" and Series "accu-Pb"



Technical data for maintenance-free lead acid batteries Type "CF"

Type designation „accu-CF“ Order-No. 56 063	212 703	230 703	240 703	260 703	310 703	212 706	220 706	226 706	230 706	240 706	265 706	312 706 *
Nominal voltage	6 V	6 V	6 V	6 V	6 V	12 V	12 V	12 V	12 V	12 V	12 V	12 V
Nominal capacity C ₂₀	1.2 Ah	3.0 Ah	4.0 Ah	6.0 Ah	10.0 Ah	1.2 Ah	2.0 Ah	2.6 Ah	3.0 Ah	4.0 Ah	6.5 Ah	12 Ah
Discharge rate 0.05 CA (I ₂₀) (A)	0.06	0.15	0.2	0.3	0.5	0.06	0.1	0.13	0.15	0.2	0.325	0.6
max. discharge current t = 5 sec. (A)	40	40	40	40	40	40	40	40	40	40	40	70
max. charging current 0.3 CA (A)	0.36	0.9	1.2	1.8	3.0	0.36	0.6	0.78	0.9	1.2	1.95	3.6
Internal resistance approx. (mΩ)	70	35	20	20	10	110	90	110	60	45	25	20
Height (mm)	51	60	102	94	94	51	60	70	60	70	94	94
Length (mm)	97	134	70	151	151	98	178	195	134	195	151	151
Width (mm)	25	34	48	34	50	48	34	47	67	47	65	98
Weight approx. (kg)	0.28	0.62	0.80	1.2	1.9	0.56	0.93	1.4	1.2	1.7	2.5	4.0

All types have available 50 % of nominal capacity at the 1 CA discharge rate (at room temperature). * deliverable in the middle of 1989

Technical data for maintenance-free lead acid batteries Type "Pb"

Type designation "accu-Pb" Order-No. 560	10 701 053	30 701 063	57 701 063	95 701 063	11 703 063	30 703 063	57 703 063	95 703 063	11 706 063	18 706 063	57 706 063	95 706 063
Nominal voltage	V	2V	2V	2V	2V	6V	6V	6V	6V	12V	12V	12V
Nominal capacity C ₂₀	Ah	1 Ah	3 Ah	5.7 Ah	9.5 Ah	1.1 Ah	3 Ah	5.7 Ah	9.5 Ah	1.1 Ah	1.8 Ah	5.7 Ah
Discharge current C ₂₀ A (I ₂₀)	A	0.05	0.15	0.285	0.475	0.055	0.15	0.285	0.475	0.055	0.09	0.285
End of discharge voltage at C ₂₀ A	V	1.75	1.75	1.75	1.75	5.25	5.25	5.25	5.25	10.5	10.5	10.5
Weight	g	85	215	380	575	285	620	1110	1710	560	875	2225
Dimensions mm												
Length	l	18.7	44.9	33.5	52.9	97.3	134.5	151.5	151.7	97.5	178.5	151.7
Width	b	42.5	34.3	51.0	50.5	25.5	34.8	34.5	50.5	49.5	34.0	65.0
Height	h ₁	50.5	60.5	94.5	94.5	51.0	60.5	94.5	94.5	51.0	60.5	94.5
Height with terminals	h ₂	55.4	62.1	96.1	98.4	54.9	64.4	98.5	98.4	54.9	64.4	98.4

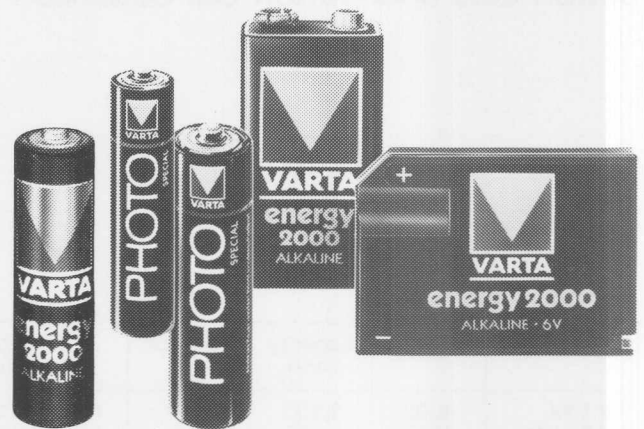
Primary batteries

Zinc Carbon



VARTA-Type Order-No.	Capacity mAh	Nominal voltage V	Size/Standard	Dimensions (mm)			Weight g
				ø/L	W	H	
Super high performance							
2006	950	1.5	AA/R6/SUM-3	14.5		50.5	21
2010	925	3	2 R 10	21.8		74.6	40
2012	1900	4.5	3 R 12	62.0	22.0	67.0	110
2014	2500	1.5	C/R14/SUM-2	26.2		50.0	46
2020	6000	1.5	D/R20/SUM-1	34.2		61.5	95
2022	300	9	6F22	26.5	17.5	48.5	38
	3606	1.5	AA/R6/SUM-3	14.5		50.5	21
	3614	1.5	C/R14/SUM-2	26.3		50.5	46
	3620	1.5	D/R20/SUM-1	34.2		61.5	95
	3622	9	6F22	26.5	17.5	48.5	38
Special types							
430	7600	6	4R25X	67.0	67.0	98.0	600
431	9600	6	4R25X	67.0	67.0	98.0	600
439	4300	9	6F100	64.0	50.0	81.0	460

Alkali Manganese Cylindrical

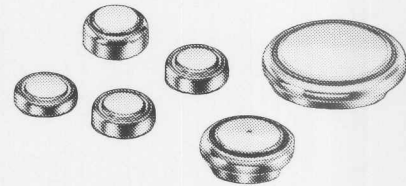


VARTA-Type	Order-No.	Capacity* mAh	Nom. voltage V	Size/Standard	Dimensions (mm)			Weight g
					ø/L	W	H	
4001	4001	500	1.5	N/LR1/AM5	12.0		30.2	10
4003	4003	950	1.5	AAA/LR03/AM4	10.5		44.5	11
4006	4006	2,000	1.5	AA/LR6/AM3	14.5		50.5	23
4014	4014	6,000	1.5	C/LR14/AM2	26.2		50.0	64.5
4018	4018	450	6	(7K67)	48.26	35.56	9.02	34
4020	4020	13,000	1.5	D/LR20/AM1	34.2		61.5	127
4022	4022	450	9	6LR61/6AM6	26.5	17.5	48.5	46
V 1500 PX	4206	2,000	1.5	AA/LR6/AM3	14.5		50.5	23
V 2400 PX	4203	950	1.5	AAA/LR03/AM4	10.5		44.5	11

* Capacity based on 100 h rate about.

Alkaline Manganese Button

Button cells and button cell batteries



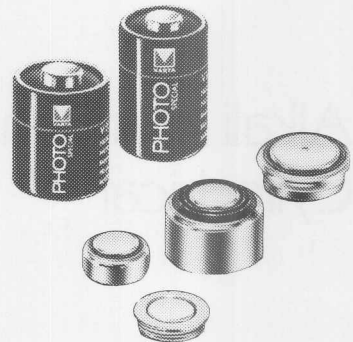
VARTA-Type	Order-No.	Capacity mAh	Nom. volt. V	Size/Standard	Dimensions (mm)			Weight g	Major Application
					ø/L	W	H		
V 4034 PX	4034	100	6	4L44/4G13	13.0		25.2	10.4	photo
V 72 PX	4072	70	22.5	*	26.0	15.0	50.0	39	photo
V 74 PX	4074	40	15	**	15.2		35.0	17	photo
V 3 GA	4261	25	1.5	LR41/G3	7.9		3.6	0.6	general, watch
V 8 GA	4273	25	1.5	LR55/G8	11.6		2.1	0.8	calculator
V 10 GA	4274	45	1.5	LR54/G10	11.6		3.1	1.1	calculator
V 12 GA	4278	75	1.5	LR43/G12	11.6		4.2	1.6	calculator
V 13 GA	4276	100	1.5	LR44/G13	11.6		5.4	1.8	calculator
V 625 U	4626	185	1.5	LR9	16.0		6.2	3.3	photo, general
V 825 PX	4825	350	1.5	LR53/PX825	23.2		6.1	7.2	photo

* Same dimensions as 15 F 20

** Same dimensions as 10 F 15

Mercury Button

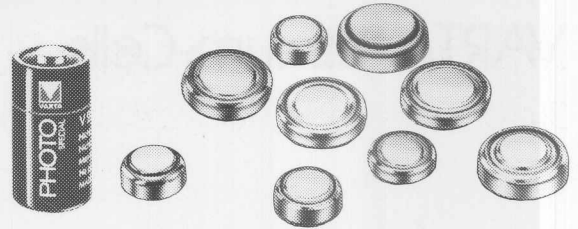
Button cells and button cell batteries



VARTA-Type	Order-No.	Capacity mAh	Nom. volt. V	Size/Standard Cross Reference	Dimensions (mm)		Weight g	Major Application
					ø	H		
V 1 PX	4002	1,100	1.4	MR50/PX1	16.4	16.8	12	photo
V 13 HM	4013	85	1.4	NR48/HM13	7.9	5.4	1.2	hearing aids
V 14 PX	4015	420	2.7	2MR9/PX14/H-2D	16.8	16.0	10	photo
V 23 PX	4023	100	5.6	4NR42/PX23	15.2	20.0	12	photo
V 27 PX	4027	145	5.6	4NR43/PX27	12.85	20.5	10.2	photo
V 149 U	4149	110	12.6		15.2	35.0	23	photo, general
V 164 PX	4164	550	5.6	4MR52/PX164	16.8	44.9	34	photo
V 312 HM	4312	54	1.4	NR41/HM312	7.9	3.6	0.78	hearing aids
V 400 PX	4400	80	1.35	PX400/H-B	11.6	3.6	1.1	photo
4/625 PX	4624	450	5.4	4MR9	16.4	24.4	20	medical equipments
V 625 PX	4625	450	1.35	MR9/PX625/H-D	16.0	6.2	4.6	photo
V 640 PX	4640	550	1.35	MR52/PX640	15.9	11.2	7.9	photo
V 675 HP	4675	250	1.4	NR44/HP675	11.6	5.4	2.6	hearing aids
V 675 PX	4677	210	1.35	MR44/PX675/H-C	11.6	5.4	2.7	photo
V 343	343	110	1.35	509/MR42/3/RW56	11.6	3.6	1.63	watch
V 387	387	80	1.35	502/RW51	11.5	3.6	1.05	watch
V 388	388	65	1.35	503	8.85	3.15	0.92	watch

Silver Button

Button cells and button cell batteries



VARTA-Type	Order-No.	Capacity mAh	Nom. volt. V	Size/Standard Cross Reference	Dimensions (mm)		Weight g	Major Application
					∅	H		
V 28 PX	4028	145	6	4SR44/4G-13	13.0	25.2	12.8	photo
V 76 PX	4075	145	1.55	SR44	11.6	5.4	2.4	photo
V 301	301	115	1.55	528/SR43/1/RW34/SR43SW	11.6	4.2	1.78	watch
V 303	303	170	1.55	521/SR44/9/RW32/SR44SW	11.6	5.4	2.33	watch
V 309	309	70	1.55	526/SR48/16/RW38	7.9	5.4	1.08	watch
V 315	315	19	1.55	530/40/RW316/SR7116SW	7.9	1.6	0.4	watch
V 317	317	8	1.55	566/SR516SW	5.8	1.6	0.18	watch
V 319	319	16	1.55	RW328/SR527	5.8	2.7	0.25	watch
V 321	321	13	1.55	540/38/SR16SW	6.8	1.6	0.25	watch
V 329	329	36	1.55	525/24	7.9	3.1	0.6	watch
V 339	339	11	1.55	-/52/-	6.8	1.4	0.22	watch
V 341	341	11	1.55	567/39	7.9	1.4	0.27	watch
V 344	344	100	1.55	529/SR42/12/RW36	11.6	3.6	1.49	watch
V 350	350	100	1.55	549/SR42/14	11.6	3.6	1.49	watch
V 357	357	155	1.55	541/SR44/7/RW42/SR44W	11.6	5.4	2.33	watch
V 361	361	18	1.55	SR58/SR721W	7.9	2.1	0.4	watch
V 362	362	21	1.55	532/SR58/19/RW310/SR721SW	7.9	2.1	0.4	watch
V 364	364	20	1.55	531/SR60/31/RW320/SR621SW	6.8	2.15	0.33	watch
V 370	370	30	1.55	SR920W	9.5	2.1	0.6	watch
V 371	371	32	1.55	537/30/RW315/SR920SW	9.5	2.1	0.61	watch
V 373	373	23	1.55	539/41/RW317/SR916SW	9.5	1.6	0.5	watch
V 377	377	23	1.55	565/SR626SW/37/RW329	6.8	2.6	0.39	watch
V 379	379	12	1.55	520/RW327/SR521SW	5.8	2.1	0.23	watch
V 381	381	45	1.55	533/SR55/34/RW30/SR1120SW	11.6	2.1	0.9	watch
V 384	384	38	1.55	527/SR41/10/RW37/SR41SW	7.9	3.6	0.69	watch
V 386	386	105	1.55	548/SR43/6/RW44/SR43W	11.6	4.2	1.78	watch
V 389	389	85	1.55	554/SR54/17/RW49/SR1130W	11.6	3.1	1.32	watch
V 390	390	80	1.55	534/SR54/11/RW39/SR1130SW	11.6	3.1	1.32	watch
V 391	391	40	1.55	553/Sr55/23/RW40/SR1120W	11.6	2.1	0.9	watch
V 392	392	38	1.55	547/SR41/2/RW47/SR41W	7.9	3.6	0.69	watch
V 393	393	66	1.55	546/SR48/15/RW48/SR754W	7.9	5.4	1.08	watch
V 394	394	67	1.55	524/SR45/27/RW33/SR936SW	9.5	3.6	1.04	watch
V 395	395	42	1.55	523/SR57/25/RW313/SR926SW	9.5	2.6	0.75	watch
V 396	396	25	1.55	556/SR59/20/RW411/SR726W	7.9	2.6	0.55	watch
V 397	397	30	1.55	536/SR59/260RW311/SR726SW	7.9	2.6	0.50	watch
V 399	399	42	1.55	543/SR57/35/RW413/SR926W	9.5	2.6	0.75	watch
4016*	4016	3400	1.55	SR14	25.2	50.0	68	Operating temperature max. 165 °C

* Silver cell size R 14, available with welded tags.

Zinc Air Batteries

Button cells (KOH electrolyte) for hearing Aids

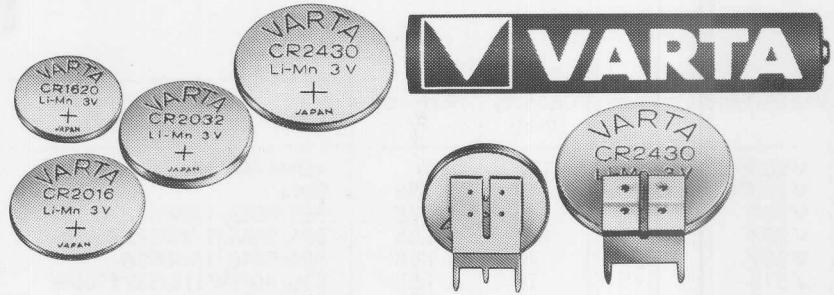
VARTA-Type	Order-No.	Capacity mAh	Nom. volt. V	Size/Standard	Dimensions (mm)		Weight g
					∅	H	
V 675 A	4600	400	1.4	PR 44	11.6	5.4	1.7
V 675 HPA	4601	250	1.4	PR 44	11.6	5.4	1.6
V 13 A	4606	170	1.4	PR 48	7.9	5.4	0.84
V 312 A	4607	85	1.4	PR 41	7.9	3.6	0.51



Rectangular/cylindrical cells and batteries (acid electrolyte)

VARTA-Type Order-No.	Capacity Ah	Nom. voltage V	Size/Standard	Dimensions (mm)			Weight g	Major Application
				∅	W	H		
441	85	7.0	5AR40	179.0	172.0	44.0	2800	cattle fence
445	85	8.4	(6AR40)	192.0	128.0	162.0	3120	cattle fence
446	54	8.4	6AS4	168.0	113.0	114.0	2000	cattle fence
2303	50	1.4	AS4	57.0	—	125.0	350	general
2322	80	1.4	(AR10)	67.0	—	172.0	570	general

VARTA Lithium-Cells

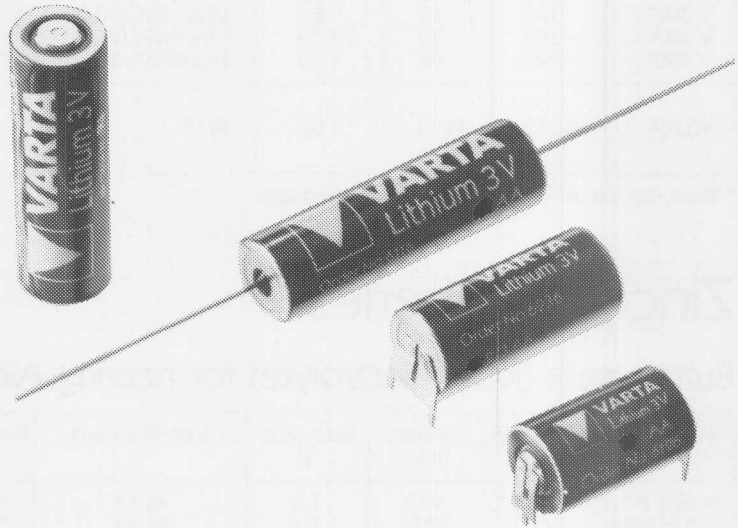


Series CR

Type	Order-No.*	Nom. voltage V	Capacity mAh	∅ mm	H mm	Weight g
CR 1/3 N	6131 101 501	3	160	11.6 ^{-0.2}	10.8 ^{-0.2}	3
CR 2 NP	6202 101 501	3	1,400	12.0 ^{-0.2}	60.0 ^{-0.2}	13
2 CR 1/3 N (V 28 PXL)	6231 101 501	6	160	13.0 ^{-0.2}	25.2 ^{-0.2}	8.8
CR 1220	6220 101 501	3	30	12.5 ^{-0.2}	2.0 ^{-0.2}	0.8
CR 1620	6620 101 501	3	50	16.0 ^{-0.2}	2.0 ^{-0.2}	1.2
CR 2016	6016 101 501	3	60	20.0 ^{-0.2}	1.6 ^{-0.2}	2.0
CR 2025	6025 101 501	3	120	20.0 ^{-0.2}	2.5 ^{-0.2}	2.5
CR 2032	6032 101 501	3	190	20.0 ^{-0.2}	3.2 ^{-0.2}	3.0
CR 2430	6430 101 501	3	270	24.5 ^{-0.2}	3.0 ^{-0.2}	4.0

* Order-No. for bare cells. Various tags are available.

VARTA Lithium-Cells



Series CR**

Type	Order-No.*	Nom. voltage V	Capacity mAh	∅ mm	H mm	Weight g
CR 1/4 AA	6147 101 501	3	350	14.8	13.8	5
CR 1/2 AA	6127 101 501	3	1,000	14.8	25.0	10
CR 2/3 AA	6137 101 501	3	1,500	14.8	33.5	12
CR AA	6117 101 501	3	2,250	14.8	50.5	18

* Order-No. for bare cells. Various tags and wire are available.

** all data under modification!

Deliveries: CR 1/2 AA on III. quarter 1989
 CR 1/4 AA on IV. quarter 1989
 CR 2/3 AA on I. quarter 1990
 CR AA on II. quarter 1990

VARTA:

First on the moon and the finest on the earth

VARTA – one of the world's leading battery manufacturers. 24 VARTA factories throughout the world supply more than 100 countries with quality products. 12,600 employees worldwide generate battery sales of 1.8 billion DM per year. The VARTA name implies safe energy – its outstanding reputation is known internationally. Pioneering new products to high standards of engineering excellence is exemplified by our range of consumer batteries.

The first man to walk on the moon used a VARTA battery in his camera. VARTA contributed to the miniaturisation of watch cells producing what was then the smallest cell in the world. VARTA was the first manufacturer to produce rechargeable Ni-Cd button cells. A large staff of physicists, chemists and engineers are continuously developing new technologies and processes for electro-

chemical stored energy. The VARTA Research Centre, the largest of its kind in Europe, is the birthplace of battery ideas for the future.

Worldwide, VARTA consumer batteries provide a means of portable power. Numerous applications include modern electrical and electronic products, television sets, radios, stereo equipment, clocks and watches, in addition to film cameras, flashguns, hearing aids, test equipment, calculators, toys, shavers, cordless telephones... In our advanced world, VARTA has improved the quality of life through their co-operation with equipment manufacturers. VARTA's unrivalled technical expertise ensures that each type in its complete range of energy systems – alkaline manganese, silver oxide, zinc air, lead acid, lithium, nickel cadmium, etc. – is a tailor-made product. Guaranteed quality, resulting from

computer controlled production processes, continuously test and control their complete manufacturing process.

Worldwide, VARTA starter batteries are used in cars, motorcycles, trucks and buses and in the rigorous conditions that exist with construction machinery, farm equipment and ships.

Worldwide, VARTA industrial batteries provide a power source for economical long term service. They provide safe power plants for hospitals, communications systems, aircraft and ships. They supply pollution free power to trains, fork lift trucks and electric road vehicles.

VARTA – the complete supplier for original equipment manufacturers and trade. Energy know-how and experience worldwide.

The dimensions quoted in this brochure are maximum dimensions for design purposes. Unless otherwise stated, weights and electrical values refer to 22 ± 2 °C room-temperature.

We reserve the right to carry out technical modifications as a result of further developments, without obligation to prior notice.



VARTA

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