

# SCL P - SCM Ni-Cd single cells

## Capacity: 10 Ah to 70 Ah

Nickel-cadmium single cells are designed for general purpose applications, where maximum operating reliability is a key factor:

- switch tripping
- emergency lighting
- alarms
- DC instrumentation

SCL P cells are designed for long discharge periods, typically 2 hours and longer.

SCM cells are designed for medium discharge periods between 30 minutes and 3 hours.



### Benefits

- They provide a long service life, minor maintenance requirements, outstanding resistance to electrical and mechanical abuse, excellent charge retention, a long shelf life and long operation over a wide temperature range.
- Translucent polypropylene containers allow visibility of the electrolyte level, hence facilitating maintenance in stationary applications.
- The junction between the lid and the container is thermo-welded, ensuring good mechanical and electrical resistance.
- Flip top vents assure an easy maintenance.
- The products are qualified according IEC 60623.



# Mechanical characteristics

Cell type	Capacity C <sub>5</sub> A (Ah)	Electrolyte reserve		Approx. weight per cell		Dimensions (mm)						Terminal
		(cm <sup>2</sup> )	(in <sup>2</sup> )	kg	lbs.	Height (H)		Width (W)		Length (L1)		
						mm	in	mm	in	mm	in	
SCL 10 P	10	80	4.88	0.9	1.9	177	6.97	122.5	4.83	35.5	1.40	M 6
SCL 20 P	20	80	4.88	1.1	2.4	177	6.97	122.5	4.83	35.5	1.40	M 6
SCL 30 P	30	165	10.1	1.8	4.0	237	9.34	122.5	4.83	44.5	1.75	M 6
SCL 40 P	40	165	10.1	1.9	4.1	237	9.34	122.5	4.83	44.5	1.75	M 6
SCL 55 P	55	195	14.0	2.8	6.1	291	11.5	122.5	4.83	54.5	2.15	M 10
SCL 70 P	70	195	14.0	3.1	6.8	291	11.5	122.5	4.83	54.5	2.15	M 10
SCM 11	11	115	7.02	1.7	3.7	287	11.3	87	3.43	46	1.81	M 10
SCM 18	18	110	6.71	1.9	4.1	287	11.3	87	3.43	46	1.81	M 10
SCM 25	25	105	6.41	2.0	4.4	287	11.3	87	3.43	46	1.81	M 10
SCM 32	32	230	14.0	3.0	6.6	287	11.3	87	3.43	86	3.39	M 10
SCM 38	38	225	13.7	3.2	7.0	287	11.3	87	3.43	86	3.39	M 10
SCM 45	45	215	13.1	3.4	7.5	287	11.3	87	3.43	86	3.39	M 10
SCM 53	53	210	12.8	3.6	8.0	287	11.3	87	3.43	86	3.39	M 10
SCM 59	59	205	12.5	3.7	8.1	287	11.3	87	3.43	86	3.39	M 10



## Saft is committed to the highest standards of environmental stewardship

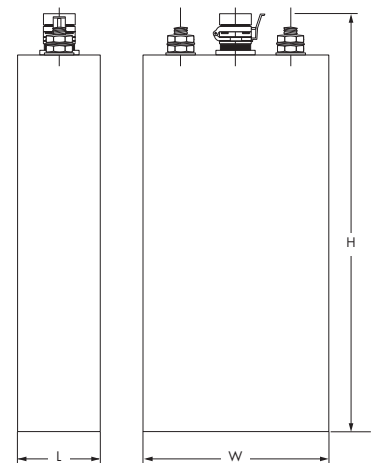
Implementing this commitment to minimise the impact of its products and operations on the environment means that Saft gives priority to recycled over unrecycled raw materials, reduces its plant releases into the environment year after year, minimizes water usage, and ensures that its customers have recycling solutions for their batteries at the end of their lives.

Regarding industrial Ni-Cd batteries, Saft has had partnerships for many years with collection companies in most EU countries as well as in North America. This collection network

receives and dispatches our customers' batteries at the end of their lives to fully approved recycling facilities, in compliance with the Laws governing transboundary waste shipments. Saft offers these services free of charge to its customers.

Please find a list of our collection points on our web site.

In other countries, Saft assists its customers in finding environmentally sound recycling solutions. Please contact your sales representative for further information.



# Cells performances

## Cell performance L type at +20°C ± 5°C (+68°F ± 9°F)

Performance for fully charged cells by a constant current charge according to IEC 60623 standard  
Available amperes

Final voltage: 1.00 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	1.13	1.36	2.00	3.03	4.05	4.87	6.10	7.00	8.20
SCL 20 P	20	2.26	2.73	4.00	6.07	8.10	9.73	12.2	14.0	16.4
SCL 30 P	30	3.27	3.94	6.00	9.50	13.2	16.0	19.8	22.4	25.8
SCL 40 P	40	4.36	5.25	8.00	12.7	17.6	21.3	26.4	29.9	34.4
SCL 55 P	55	5.83	7.22	11.0	17.8	25.3	30.8	38.5	44.0	50.6
SCL 70 P	70	7.42	9.19	14.0	22.6	32.2	39.2	49.0	56.0	64.4

Final voltage: 1.05 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	1.09	1.33	1.92	2.80	3.60	4.27	5.20	6.00	7.00
SCL 20 P	20	2.18	2.65	3.84	5.60	7.20	8.53	10.4	12.0	14.0
SCL 30 P	30	3.18	3.90	5.82	8.90	12.0	14.4	18.0	20.0	22.8
SCL 40 P	40	4.24	5.20	7.76	11.9	16.0	19.2	24.0	26.7	30.4
SCL 55 P	55	5.83	7.15	10.8	17.2	24.2	29.0	35.2	39.6	44.0
SCL 70 P	70	7.42	9.10	13.7	21.9	30.8	36.9	44.8	50.4	56.0

Final voltage: 1.10 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	1.04	1.26	1.82	2.57	3.15	3.60	4.20	4.80	5.60
SCL 20 P	20	2.08	2.53	3.64	5.13	6.30	7.20	8.40	9.60	11.2
SCL 30 P	30	3.12	3.83	5.70	8.20	10.4	12.0	14.7	16.4	19.2
SCL 40 P	40	4.16	5.10	7.60	10.9	13.8	16.0	19.6	21.9	25.6
SCL 55 P	55	5.72	7.01	10.6	15.6	20.4	24.2	29.7	33.7	38.5
SCL 70 P	70	7.28	8.93	13.4	19.8	25.9	30.8	37.8	42.9	49.0

Final voltage: 1.14 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	0.97	1.15	1.60	2.20	2.70	3.07	3.60	4.00	4.40
SCL 20 P	20	1.94	2.30	3.20	4.40	5.40	6.13	7.20	8.00	8.80
SCL 30 P	30	3.00	3.64	5.40	7.50	9.15	10.2	12.0	12.8	14.4
SCL 40 P	40	4.00	4.85	7.20	10.0	12.2	13.6	16.0	17.1	19.2
SCL 55 P	55	5.61	6.81	10.1	14.1	17.6	19.8	23.1	25.7	29.7
SCL 70 P	70	7.14	8.66	12.9	18.0	22.4	25.2	29.4	32.7	37.8

## Cell performance M type at +20°C ± 5°C (+68°F ± 9°F)

Performance for fully charged cells by a constant current charge according to IEC 60623 standard  
Available amperes

### Final voltage: 1.00 V/cell

Cell type	C <sub>5</sub> Ah	Hours						Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1	
SCM 11	11	1.12	1.39	2.20	3.56	5.12	6.60	9.13	11.3	14.7	18.5	21.1	24.4	29.0	44.0	46.2	59.4	72.6	
SCM 18	18	1.83	2.27	3.60	5.82	8.37	10.8	14.9	18.5	24.1	30.2	34.6	40.0	47.5	72.0	75.6	97.2	119	
SCM 25	25	2.54	3.15	5.00	8.08	11.6	15.0	20.8	25.7	33.5	42.0	48.0	55.5	66.0	100	105	135	165	
SCM 32	32	3.25	4.03	6.40	10.3	14.9	19.2	26.6	32.9	42.9	53.8	61.4	71.0	84.5	128	134	173	211	
SCM 38	38	3.86	4.79	7.60	12.3	17.7	22.8	31.5	39.0	50.9	63.8	73.0	84.4	100	152	160	205	251	
SCM 45	45	4.57	5.67	9.00	14.6	21.0	27.0	37.3	46.2	60.3	75.6	86.4	99.9	118	180	189	243	297	
SCM 53	53	5.38	6.68	10.6	17.1	24.6	31.8	44.0	54.4	71.0	89.0	102	118	140	212	223	286	350	
SCM 59	59	5.99	7.43	11.8	19.1	27.4	35.4	49.0	60.6	79.1	99.1	113	131	156	236	248	319	389	

### Final voltage: 1.05 V/cell

Cell type	C <sub>5</sub> Ah	Hours						Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1	
SCM 11	11	1.11	1.38	2.18	3.52	5.06	6.38	8.80	10.7	13.4	16.2	18.0	20.5	25.1	36.3	40.7	51.7	62.7	
SCM 18	18	1.81	2.25	3.56	5.76	8.28	10.4	14.4	17.5	22.0	26.5	29.5	33.5	41.0	59.4	66.6	84.6	103	
SCM 25	25	2.52	3.13	4.95	8.00	11.5	14.5	20.0	24.3	30.5	36.8	41.0	46.5	57.0	82.5	92.5	118	143	
SCM 32	32	3.22	4.00	6.34	10.2	14.7	18.6	25.6	31.1	39.0	47.0	52.5	59.5	73.0	106	118	150	182	
SCM 38	38	3.83	4.75	7.52	12.2	17.5	22.0	30.4	37.0	46.4	55.9	62.3	70.7	86.6	125	141	179	217	
SCM 45	45	4.54	5.63	8.91	14.4	20.7	26.1	36.0	43.8	54.9	66.2	73.8	83.7	103	148	167	212	257	
SCM 53	53	5.34	6.63	10.5	17.0	24.4	30.7	42.4	51.6	64.7	77.9	86.9	98.6	121	175	196	249	302	
SCM 59	59	5.94	7.38	11.7	18.9	27.1	34.2	47.2	57.4	72.0	86.7	96.8	110	135	195	218	277	336	

### Final voltage: 1.10 V/cell

Cell type	C <sub>5</sub> Ah	Hours						Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1	
SCM 11	11	1.09	1.35	2.13	3.41	4.84	6.01	7.81	9.09	11.4	13.5	15.0	17.2	19.8	30.8	34.1	44.0	52.8	
SCM 18	18	1.78	2.21	3.49	5.58	7.92	9.84	12.8	14.9	18.7	22.1	24.5	28.1	32.4	50.4	55.8	72.0	86.4	
SCM 25	25	2.48	3.08	4.85	7.75	11.0	13.7	17.8	20.7	26.0	30.8	34.0	39.0	45.0	70.0	77.5	100	120	
SCM 32	32	3.17	3.94	6.21	9.92	14.1	17.5	22.7	26.5	33.3	39.4	43.5	49.9	57.6	89.6	99.2	128	154	
SCM 38	38	3.77	4.67	7.37	11.8	16.7	20.8	27.0	31.4	39.5	46.7	51.7	59.3	68.4	106	118	152	182	
SCM 45	45	4.46	5.53	8.73	14.0	19.8	24.6	32.0	37.2	46.8	55.3	61.2	70.2	81.0	126	140	180	216	
SCM 53	53	5.25	6.52	10.3	16.4	23.3	29.0	37.6	43.8	55.1	65.2	72.1	82.7	95.4	148	164	212	254	
SCM 59	59	5.85	7.26	11.4	18.3	26.0	32.3	41.9	48.8	61.4	72.6	80.2	92.0	106	165	183	236	283	

### Final voltage: 1.14 V/cell

Cell type	C <sub>5</sub> Ah	Hours						Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1	
SCM 11	11	1.06	1.32	2.07	3.23	4.40	5.35	6.71	7.63	9.02	10.6	11.9	13.9	17.2	26.4	29.7	37.4	46.2	
SCM 18	18	1.74	2.16	3.38	5.28	7.20	8.76	11.0	12.5	14.8	17.3	19.4	22.7	28.1	43.2	48.6	61.2	75.6	
SCM 25	25	2.42	3.00	4.70	7.33	10.0	12.2	15.3	17.3	20.5	24.0	27.0	31.5	39.0	60.0	67.5	85.0	105	
SCM 32	32	3.09	3.84	6.02	9.39	12.8	15.6	19.5	22.2	26.2	30.7	34.6	40.3	49.9	76.8	86.4	109	134	
SCM 38	38	3.67	4.56	7.14	11.2	15.2	18.5	23.2	26.4	31.2	36.5	41.0	47.9	59.3	91.2	103	129	160	
SCM 45	45	4.35	5.40	8.46	13.2	18.0	21.9	27.5	31.2	36.9	43.2	48.6	56.7	70.2	108	122	153	189	
SCM 53	53	5.13	6.36	9.96	15.6	21.2	25.8	32.3	36.8	43.5	50.9	57.2	66.8	82.7	127	143	180	223	
SCM 59	59	5.71	7.08	11.1	17.3	23.6	28.7	36.0	40.9	48.4	56.6	63.7	74.3	92.0	142	159	201	248	

## Cell performance L type at +20°C ± 5°C (+68°F ± 9°F)

Performance after prolonged float charge of fully charged cells

Available amperes

Final voltage: 1.00 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	1.13	1.36	2.00	3.03	3.85	4.38	5.31	5.95	6.81
SCL 20 P	20	2.26	2.73	4.00	6.07	7.70	8.76	10.6	11.9	13.6
SCL 30 P	30	3.27	3.94	6.00	9.50	12.5	14.4	17.2	19.0	21.4
SCL 40 P	40	4.36	5.25	8.00	12.7	16.7	19.2	23.0	25.4	28.6
SCL 55 P	55	5.83	7.22	11.0	17.8	24.0	27.7	33.5	37.4	42.0
SCL 70 P	70	7.42	9.19	14.0	22.6	30.6	35.3	42.6	47.6	53.5

Final voltage: 1.05 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	1.09	1.33	1.92	2.55	3.10	3.58	4.21	4.77	5.46
SCL 20 P	20	2.18	2.65	3.84	5.10	6.19	7.17	8.42	9.54	10.9
SCL 30 P	30	3.18	3.90	5.82	8.10	10.3	12.1	14.6	15.9	17.8
SCL 40 P	40	4.24	5.20	7.76	10.8	13.8	16.1	19.4	21.2	23.7
SCL 55 P	55	5.83	7.15	10.8	15.7	20.8	24.3	28.5	31.5	34.3
SCL 70 P	70	7.42	9.10	13.7	20.0	26.5	31.0	36.3	40.1	43.7

Final voltage: 1.10 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	1.04	1.22	1.64	2.13	2.52	2.81	3.19	3.58	4.09
SCL 20 P	20	2.08	2.45	3.28	4.26	5.04	5.62	6.38	7.15	8.18
SCL 30 P	30	3.12	3.71	5.13	6.81	8.28	9.36	11.2	12.2	14.0
SCL 40 P	40	4.16	4.95	6.84	9.07	11.0	12.5	14.9	16.3	18.7
SCL 55 P	55	5.72	6.80	9.50	12.9	16.3	18.9	22.6	25.1	28.1
SCL 70 P	70	7.28	8.66	12.1	16.5	20.7	24.0	28.7	32.0	35.8

Final voltage: 1.14 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes			
		10	8	5	3	2	90	60	45	30
SCL 10 P	10	0.97	1.09	1.30	1.67	2.00	2.24	2.56	2.78	2.99
SCL 20 P	20	1.94	2.19	2.59	3.34	4.00	4.48	5.11	5.56	5.98
SCL 30 P	30	3.00	3.46	4.37	5.70	6.77	7.45	8.52	8.90	9.79
SCL 40 P	40	4.00	4.61	5.83	7.60	9.03	9.93	11.4	11.9	13.1
SCL 55 P	55	5.61	6.47	8.20	10.7	13.0	14.5	16.4	17.8	20.2
SCL 70 P	70	7.14	8.23	10.4	13.7	16.6	18.4	20.9	22.7	25.7

## Cell performance M type at +20°C ± 5°C (+68°F ± 9°F)

Performance after prolonged float charge of fully charged cells

Available amperes

### Final voltage: 1.00 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1
SCM 11	11	1.12	1.39	2.20	3.56	5.12	6.14	7.94	9.54	12.1	15.2	17.1	19.5	23.2	35.2	37.0	47.5	58.1
SCM 18	18	1.83	2.27	3.60	5.82	8.37	10.0	13.0	15.6	19.8	24.8	28.0	32.0	38.0	57.6	60.5	77.8	95.0
SCM 25	25	2.54	3.15	5.00	8.08	11.6	14.0	18.1	21.7	27.5	34.4	38.9	44.4	52.8	80.0	84.0	108	132
SCM 32	32	3.25	4.03	6.40	10.3	14.9	17.9	23.1	27.8	35.2	44.1	49.8	56.8	67.6	102	108	138	169
SCM 38	38	3.86	4.79	7.60	12.3	17.7	21.2	27.4	33.0	41.8	52.3	59.1	67.5	80.3	122	128	164	201
SCM 45	45	4.57	5.67	9.00	14.5	21.0	25.2	32.5	39.1	49.5	62.0	70.0	79.9	95.1	143	152	194	238
SCM 53	53	5.38	6.68	10.6	17.1	24.6	29.6	38.3	46.0	58.2	73.0	82.4	94.1	112	170	178	229	280
SCM 59	59	5.99	7.43	11.8	19.1	27.4	32.9	42.6	51.2	64.8	81.3	91.8	105.00	125	189	198	255	312

### Final voltage: 1.05 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1
SCM 11	11	1.11	1.38	2.18	3.52	4.55	5.42	7.22	8.57	10.5	12.3	13.7	15.5	18.8	27.2	30.5	38.8	47.0
SCM 18	18	1.81	2.25	3.56	5.76	7.45	8.87	11.8	14.0	17.1	20.1	22.4	25.4	30.8	44.6	50.0	63.5	77.0
SCM 25	25	2.52	3.13	4.95	8.00	10.4	12.3	16.4	19.5	23.8	27.9	31.2	35.3	42.8	61.9	69.4	88.1	107
SCM 32	32	3.22	4.00	6.34	10.2	13.2	15.8	21.0	24.9	30.5	35.8	39.9	45.2	54.7	79.2	88.8	113	137
SCM 38	38	3.83	4.75	7.52	12.2	15.7	18.7	24.9	29.6	36.2	42.5	47.4	53.7	65.0	94.1	105	134	162
SCM 45	45	4.54	5.63	8.91	14.4	18.6	22.1	29.5	35.1	42.9	50.3	56.1	63.6	77.0	111	124	159	192
SCM 53	53	5.34	6.63	10.5	17.0	21.9	26.1	34.8	41.3	50.4	59.2	66.1	74.9	90.6	131	147	187	227
SCM 59	59	5.94	7.38	11.7	18.9	24.4	29.1	38.7	45.9	56.1	65.9	73.5	83.4	101.00	146	164	208	252

### Final voltage: 1.10 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1
SCM 11	11	1.09	1.35	2.13	3.17	4.07	4.81	6.01	6.87	8.47	9.88	10.8	12.2	14.1	21.9	24.2	31.2	37.5
SCM 18	18	1.78	2.21	3.49	5.19	6.65	7.87	9.84	11.2	13.9	16.2	17.6	19.9	23.0	35.8	39.6	51.1	61.3
SCM 25	25	2.48	3.08	4.85	7.21	9.24	10.9	13.7	15.6	19.2	22.4	24.5	27.7	32.0	49.7	55.0	71.0	85.2
SCM 32	32	3.17	3.94	6.21	9.23	11.8	14.0	17.5	20.0	24.6	28.7	31.3	35.4	40.9	63.6	70.4	90.9	109
SCM 38	38	3.77	4.67	7.37	11.0	14.0	16.6	20.8	23.7	29.2	34.1	37.2	42.1	48.6	75.5	83.6	108	130
SCM 45	45	4.46	5.53	8.73	13.0	16.6	19.7	24.6	28.1	34.6	40.4	44.1	49.9	57.6	89.4	99.0	128	154
SCM 53	53	5.25	6.52	10.3	15.3	19.6	23.2	29.0	33.1	40.8	47.6	51.9	58.7	67.7	105	117	151	181
SCM 59	59	5.85	7.26	11.4	17.0	21.8	25.8	32.3	36.8	45.4	53.0	57.8	65.3	75.4	117	130	168	201

### Final voltage: 1.14 V/cell

Cell type	C <sub>5</sub> Ah	Hours					Minutes									Seconds		
		10	8	5	3	2	90	60	45	30	20	15	10	5	1	30	5	1
SCM 11	11	1.06	1.32	2.07	2.74	3.39	4.02	4.83	5.38	6.22	7.18	7.96	9.29	11.5	17.7	19.9	25.1	31.0
SCM 18	18	1.74	2.16	3.38	4.49	5.54	6.57	7.91	8.80	10.2	11.8	13.0	15.2	18.8	28.9	32.6	41.0	50.7
SCM 25	25	2.42	3.00	4.70	6.23	7.70	9.13	11.0	12.2	14.1	16.3	18.1	21.1	26.1	40.2	45.2	57.0	70.4
SCM 32	32	3.09	3.84	6.02	7.98	9.86	11.7	14.1	15.6	18.1	20.9	23.2	27.0	33.4	51.5	57.9	72.9	90.0
SCM 38	38	3.67	4.56	7.14	9.47	11.7	13.9	16.7	18.6	21.5	24.8	27.5	32.1	39.7	61.1	68.7	86.6	107
SCM 45	45	4.35	5.40	8.46	11.2	13.9	16.5	19.8	22.0	25.5	29.4	32.6	38.0	47.0	72.4	81.4	103	127
SCM 53	53	5.13	6.36	9.96	13.2	16.3	19.3	23.3	25.9	30.0	34.6	38.4	44.7	55.4	85.2	95.9	121	149
SCM 59	59	5.71	7.08	11.1	14.7	18.2	21.5	25.9	28.8	33.4	38.5	42.7	49.8	61.7	94.9	107	134	166

## Saft Industrial Battery Group

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