Sonnenschein®

Industrial Batteries – Network Power
Sonnenschein A400
Outstanding cost efficient.

Specifications

EXIDE TECHNOLOGIES
INDUSTRIAL ENERGY

Make use of the superiority of the experienced dryfit technology.

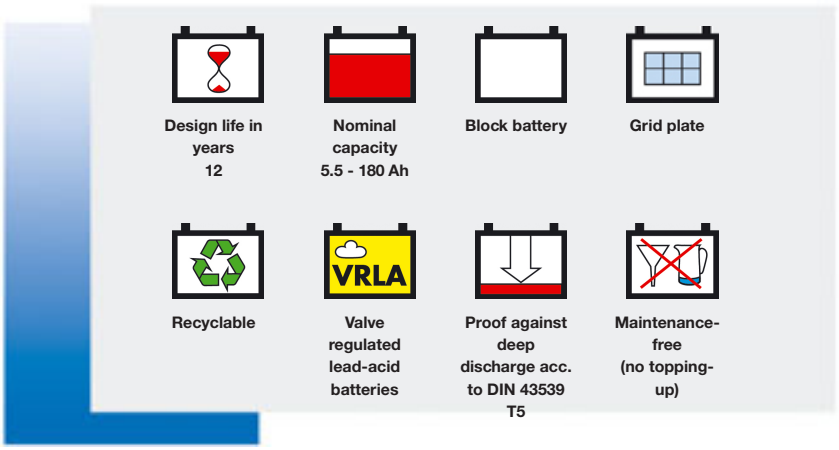
Specifications

- The success of Sonnenschein A400 batteries comes from the internationally superior dryfit technology
- Exceptional energy storage capacity combined with long life
- Maintenance-free (no topping up) during the whole service life due to the Sonnenschein dryfit technology
- Nominal capacity 5.5 – 180 Ah C_{10}
- 12 years design life at 20 °C ambient temperature (80% remaining capacity from C_{10})
- EUROBAT Classification: Long Life
- Grid plate construction consisting of a lead calcium alloy
- Very low gassing due to internal gas recombination
- Shelf life up to 2 years at 20 °C without recharge due to the very slow self discharge rate
- Short recharging time
- Proof against deep discharge according to DIN 43 539 T5
- Trouble-free transport of operational blocks, no restrictions for rail, road, sea and air transportation (IATA, DGR clause A67)
- Completely recyclable

More power for network power.

Applications

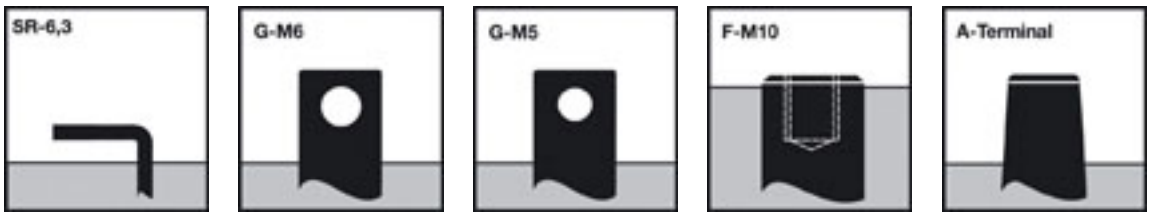
In telecommunications, Sonnenschein A400 batteries are simply indispensable. But also in applications like utility, emergency lighting, security, railways and other safety power supplies the Sonnenschein A400 is an absolutely reliable source of energy.



Exide type designation	Part number	Nom. Voltage V	Nominal capacity C_{10} 1.80 VpC 20 °C Ah	Max. Load approx. A	Length l max. mm	Width b/w max. mm	Height top of cover h1 max. mm	Height over terminals h2 max. mm	Weight approx. kg	Internal resistance acc. IEC896-2 mOhm	Short circuit current acc. IEC896-2 A	Terminal
A406/165 A	NGA4060165HS0CA	6	165	770	244	190	254	275	28.0	2.10	2800	A-Terminal
A406/165 F10	NGA4060165HS0FA	6	165	770	244	190	254	282	28.5	2.10	2800	F-M10
A412/5,5 SR	NGA41205D5HS0RA	12	5.50	80.0	152	65.5	94.5	98.4	2.50	138	93.0	SR-6,3
A412/8,5 SR	NGA41208D5HS0RA	12	8.50	80.0	152	98.0	94.5	98.4	3.60	86.0	150	SR-6,3
A412/12 SR	NGA4120012HS0RA	12	12.0	100	181	76.0	152	156	5.60	47.0	260	SR-6,3
A412/20 G5	NGA4120020HS0BA	12	20.0	200	167	176	126	126	9.00	25.0	460	G-M5
A412/32 G6	NGA4120032HS0BA	12	32.0	400	210	175	175	175	13.6	15.0	784	G-M6
A412/32 F10	NGA4120032HS0FA	12	32.0	400	210	175	175	181	14.1	15.0	784	F-M10
A412/50 A	NGA4120050HS0CA	12	50.0	440	278	175	190	190	18.5	10.0	1220	A-Terminal
A412/50 F10	NGA4120050HS0FA	12	50.0	440	278	175	190	196	19.0	10.0	1220	F-M10
A412/50 G6	NGA4120050HS0BA	12	50.0	440	278	175	190	190	18.5	10.0	1220	G-M6
A412/65 F10	NGA4120065HS0FA	12	65.0	440	353	175	190	220	23.5	9.00	1414	F-M10
A412/65 G6	NGA4120065HS0BA	12	65.0	440	353	175	190	190	23.0	9.00	1414	G-M6
A412/85 F10	NGA4120085HS0FB	12	85.0	770	204	244	250	276	32.0	8.00	1472	F-M10
A412/90 A	NGA4120090HS0CA	12	90.0	770	284	267	208	230	34.5	7.00	1733	A-Terminal
A412/90 F10	NGA4120090HS0FA	12	90.0	770	284	267	208	237	35.0	7.00	1733	F-M10
A412/100 A	NGA4120100HS0CA	12	100	770	513	189	195	223	36.5	6.90	1777	A-Terminal
A412/100 F10	NGA4120100HS0FA	12	100	770	513	189	195	223	37.0	6.90	1777	F-M10
A412/120 A	NGA4120120HS0CA	12	120	770	513	223	195	223	45.5	5.70	2118	A-Terminal
A412/120 F10	NGA4120120HS0FA	12	120	770	513	223	195	223	46.0	5.70	2118	F-M10
A412/180 A	NGA4120180HS0CA	12	180	770	518	274	216	238	64.0	3.80	3227	A-Terminal
A412/180 F10	NGA4120180HS0FA	12	180	770	518	274	216	244	64.5	3.80	3227	F-M10

Max. load with suitable matching contacts A412/85 F10 with central degassing h2 for F10 terminals plus max. 24 mm for connector/screw

Container, approval, terminal and torque

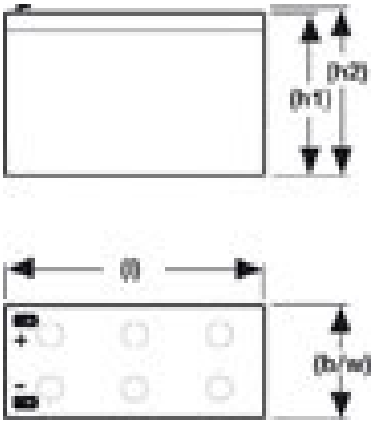


6 Nm 5 Nm 17 Nm 8 Nm

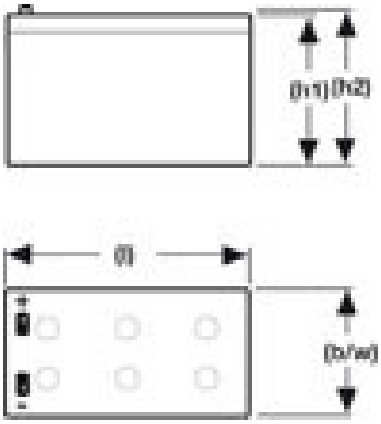
Container: 5.5 – 12 Ah = ABS
20 – 180 Ah = Polypropylene (PP)

Approval: Underwriters Laboratories (UL), USA
DIN/Gost/TÜV, Russia

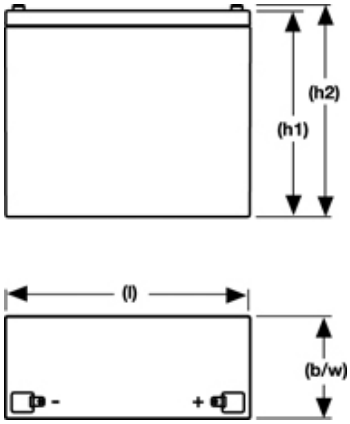
A412/5,5 SR



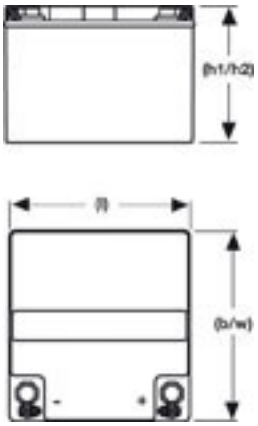
A412/8,5 SR



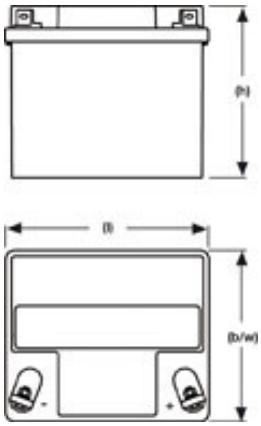
A412/12 SR



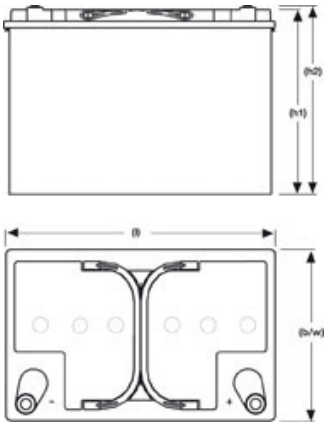
A412/20 G5



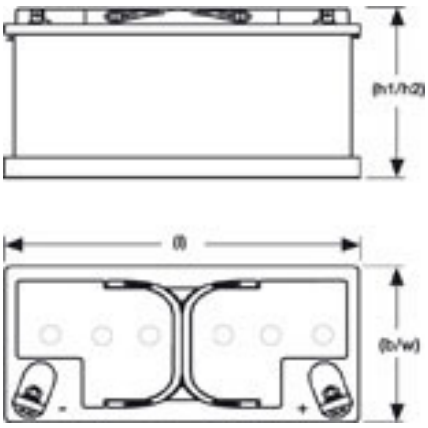
A412/32 G6



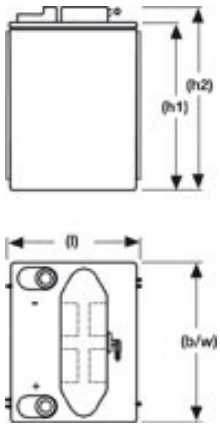
A412/50 F10



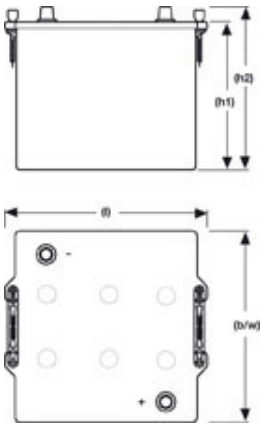
A412/65 G6



A412/85 F10



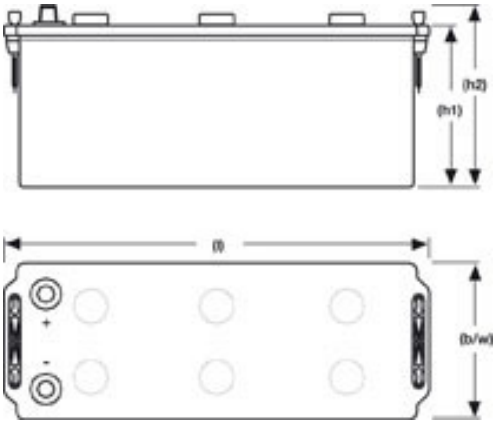
A412/90 A



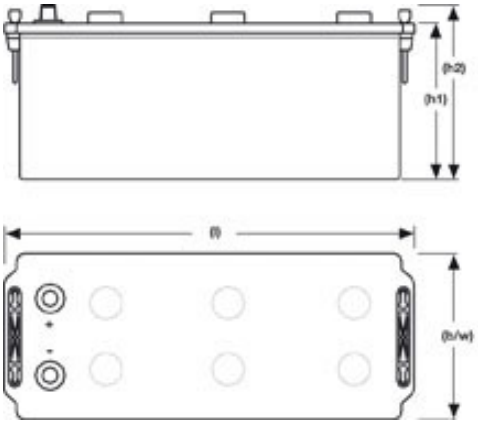
not to scale

Dimensions

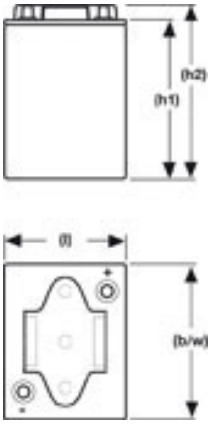
A412/100 A



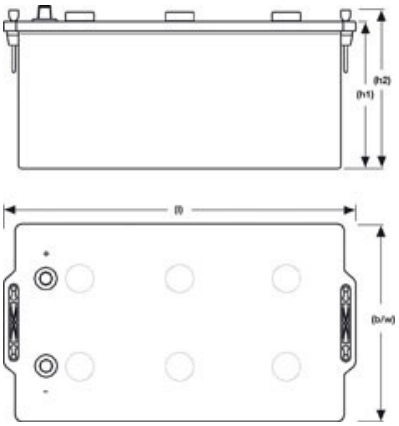
A412/120 A



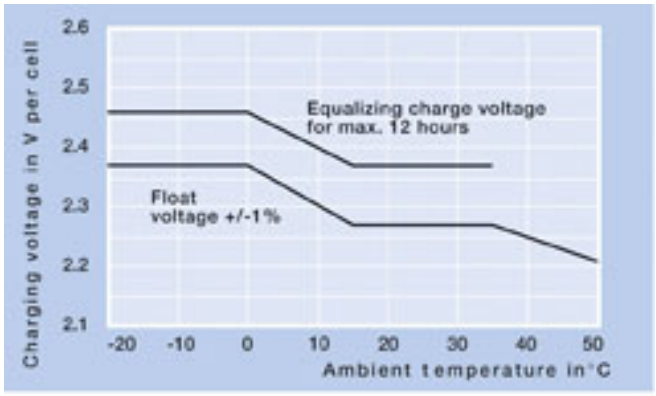
A406/165 A



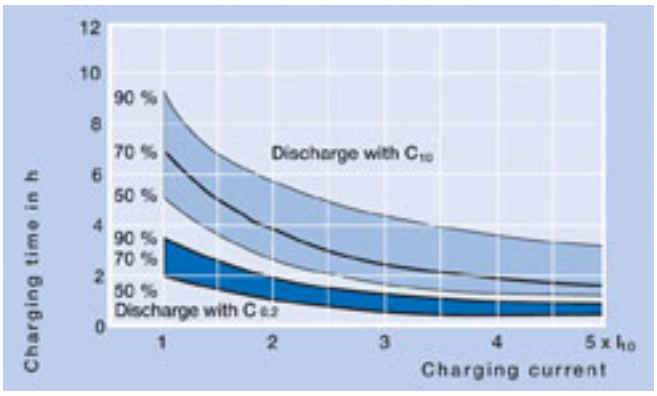
A412/180 A



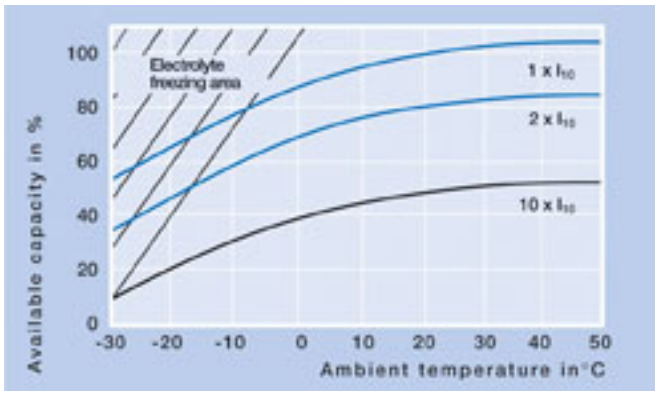
not to scale



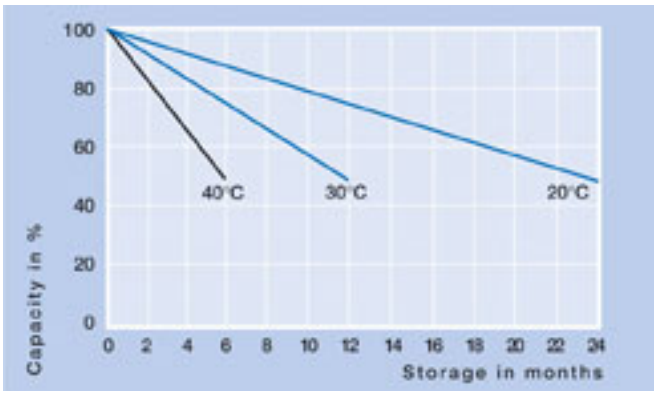
For charging 2.27 V/cell is recommended. The charging voltage must be compensated according to the curve for continuously different battery ambient temperature.



Recharging time in dependence of charging current (guide values) for up to 50, 70 and 90% of capacity at 20°C and with a charging voltage of 2.27 V/cell.



Extracted capacity in relation to the temperature.



Self-discharge in relation to the storage temperature.

1.85 VpC - Discharge in A at 20 °C														
Exide type designation	Part number	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
A406/165A	NGA4060165HS0CA	196	163	143	131	115	98.0	82.0	53.0	41.0	32.4	27.0	18.1	15.9
A412/5,5SR	NGA41205D5HS0RA	9.90	8.30	7.00	6.00	4.90	3.80	3.00	2.00	1.40	1.10	1.00	0.60	0.50
A412/8,5SR	NGA41208D5HS0RA	15.0	12.0	10.0	8.00	6.90	5.30	4.30	2.80	2.10	1.70	1.40	1.00	0.80
A412/12SR	NGA4120012HS0RA	18.0	15.0	12.0	11.0	9.00	7.00	5.50	3.30	2.50	2.00	1.70	1.20	1.10
A412/20G5	NGA4120020HS0BA	33.0	25.0	22.0	20.0	17.0	14.0	11.0	6.00	4.70	3.80	3.20	2.10	1.90
A412/32G6	NGA4120032HS0BA	53.0	43.0	36.0	32.0	28.0	21.0	17.0	11.0	8.10	6.50	5.40	3.70	3.00
A412/50G6	NGA4120050HS0BA	81.0	68.0	57.0	51.0	42.0	34.0	28.0	18.0	12.8	10.2	8.50	5.70	4.80
A412/65G6	NGA4120065HS0BA	102	77.0	63.0	56.0	48.0	42.0	36.0	22.0	15.9	12.9	10.9	7.30	6.20
A412/85F10	NGA4120085HS0FB	121	103	89.0	80.0	71.0	55.0	45.0	29.0	21.3	16.9	14.1	9.60	8.20
A412/90A	NGA4120090HS0CA	136	117	100	89.0	71.0	55.0	46.0	30.0	22.8	17.6	14.8	10.4	8.90
A412/100A	NGA4120100HS0CA	144	124	105	93.0	72.0	56.0	46.0	31.0	23.5	17.9	15.2	10.8	9.60
A412/120A	NGA4120120HS0CA	175	138	120	108	95.0	78.0	61.0	37.0	27.5	22.3	18.9	13.0	11.3
A412/180A	NGA4120180HS0CA	240	193	170	156	130	103	84.0	59.0	42.6	34.1	28.6	19.2	16.5
1.80 VpC - Discharge in A at 20 °C														
Exide type designation	Part number	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
A406/165A	NGA4060165HS0CA	243	211	180	158	132	109	88.0	56.0	43.1	33.9	28.2	18.8	16.5
A412/5,5SR	NGA41205D5HS0RA	11.3	9.30	7.80	6.50	5.10	4.00	3.20	2.10	1.50	1.20	1.00	0.70	0.50
A412/8,5SR	NGA41208D5HS0RA	17.0	14.0	11.0	9.00	7.40	5.70	4.50	2.90	2.10	1.70	1.40	1.00	0.80
A412/12SR	NGA4120012HS0RA	21.0	18.0	14.0	12.0	10.0	8.00	6.20	3.70	2.80	2.20	1.90	1.30	1.20
A412/20G5	NGA4120020HS0BA	36.0	27.0	23.0	21.0	18.0	15.0	12.0	7.00	4.90	3.90	3.30	2.20	2.00
A412/32G6	NGA4120032HS0BA	63.0	51.0	42.0	36.0	30.0	23.0	19.0	12.0	8.60	6.80	5.70	3.90	3.20
A412/50G6	NGA4120050HS0BA	98.0	81.0	66.0	57.0	46.0	37.0	29.0	19.0	13.3	10.5	8.80	5.90	5.00
A412/65G6	NGA4120065HS0BA	120	95.0	76.0	64.0	52.0	45.0	39.0	23.0	16.7	13.4	11.3	7.60	6.50
A412/85F10	NGA4120085HS0FB	147	125	105	91.0	75.0	60.0	49.0	31.0	22.3	17.6	14.7	10.0	8.50
A412/90A	NGA4120090HS0CA	166	142	118	100	79.0	61.0	50.0	32.0	23.5	18.3	15.5	10.8	9.00
A412/100A	NGA4120100HS0CA	176	150	125	104	81.0	62.0	50.0	32.0	24.1	18.7	15.9	11.3	10.0
A412/120A	NGA4120120HS0CA	202	155	133	119	102	85.0	67.0	39.0	28.7	23.0	19.4	13.2	12.0
A412/180A	NGA4120180HS0CA	291	235	195	171	144	112	90.0	62.0	44.7	35.5	29.7	19.9	18.0
1.75 VpC - Discharge in A at 20 °C														
Exide type designation	Part number	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
A406/165A	NGA4060165HS0CA	290	246	210	180	143	115	92.0	58.0	43.7	34.4	28.6	19.1	16.6
A412/5,5SR	NGA41205D5HS0RA	13.0	9.80	8.20	6.90	5.30	4.20	3.30	2.20	1.50	1.20	1.00	0.70	0.50
A412/8,5SR	NGA41208D5HS0RA	19.0	15.0	12.0	10.0	7.50	5.80	4.60	3.00	2.20	1.70	1.50	1.00	0.80
A412/12SR	NGA4120012HS0RA	24.0	20.0	16.0	13.0	10.0	8.00	6.60	3.90	2.90	2.30	1.90	1.40	1.20
A412/20G5	NGA4120020HS0BA	45.0	34.0	27.0	23.0	18.0	15.0	12.0	7.00	5.00	3.90	3.30	2.20	2.00
A412/32G6	NGA4120032HS0BA	73.0	57.0	46.0	39.0	31.0	24.0	19.0	12.0	8.80	6.90	5.80	3.90	3.20
A412/50G6	NGA4120050HS0BA	109	90.0	73.0	61.0	48.0	38.0	30.0	19.0	13.5	10.7	8.90	6.00	5.00
A412/65G6	NGA4120065HS0BA	134	107	84.0	70.0	56.0	48.0	41.0	24.0	17.1	13.6	11.4	7.70	6.50
A412/85F10	NGA4120085HS0FB	170	140	118	100	79.0	63.0	51.0	32.0	22.7	17.9	14.9	10.0	8.50
A412/90A	NGA4120090HS0CA	186	154	128	108	84.0	64.0	52.0	33.0	24.1	18.8	15.8	11.0	9.00
A412/100A	NGA4120100HS0CA	194	160	134	112	86.0	65.0	52.0	33.0	24.8	19.2	16.3	11.4	10.0
A412/120A	NGA4120120HS0CA	233	174	145	127	106	88.0	69.0	40.0	29.1	23.3	19.5	13.2	12.0
A412/180A	NGA4120180HS0CA	329	266	216	185	152	117	94.0	63.0	45.6	36.1	30.2	20.2	18.0

1.70 VpC - Discharge in A at 20 °C														
Exide type designation	Part number	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
A406/165A	NGA4060165HS0CA	332	272	233	197	151	119	94.0	58.0	44.0	34.6	28.7	19.1	16.6
A412/5,5SR	NGA41205D5HS0RA	14.3	10.3	8.60	7.20	5.50	4.30	3.40	2.20	1.60	1.20	1.00	0.70	0.50
A412/8,5SR	NGA41208D5HS0RA	21.0	15.0	12.0	10.0	7.60	5.90	4.70	3.00	2.20	1.70	1.50	1.00	0.80
A412/12SR	NGA4120012HS0RA	28.0	21.0	16.0	13.0	10.0	8.00	6.80	4.00	2.90	2.30	2.00	1.40	1.20
A412/20G5	NGA4120020HS0BA	51.0	38.0	29.0	24.0	19.0	15.0	12.0	7.00	5.00	4.00	3.30	2.20	2.00
A412/32G6	NGA4120032HS0BA	84.0	61.0	50.0	42.0	32.0	25.0	20.0	12.0	8.90	7.00	5.80	3.90	3.20
A412/50G6	NGA4120050HS0BA	122	94.0	77.0	64.0	49.0	39.0	31.0	19.0	13.6	10.7	8.90	6.00	5.00
A412/65G6	NGA4120065HS0BA	148	111	89.0	73.0	57.0	49.0	41.0	24.0	17.3	13.7	11.5	7.70	6.50
A412/85F10	NGA4120085HS0FB	192	151	127	106	82.0	64.0	52.0	32.0	22.8	17.9	14.9	10.0	8.50
A412/90A	NGA4120090HS0CA	206	164	137	113	87.0	66.0	53.0	33.0	24.3	18.9	16.3	11.0	9.00
A412/100A	NGA4120100HS0CA	213	171	141	117	89.0	67.0	53.0	34.0	25.1	19.4	17.0	11.4	10.0
A412/120A	NGA4120120HS0CA	280	200	160	136	109	90.0	70.0	40.0	29.3	23.4	19.6	13.2	12.0
A412/180A	NGA4120180HS0CA	366	287	234	199	156	120	95.0	64.0	46.0	36.4	30.4	20.2	18.0
1.65 VpC - Discharge in A at 20 °C														
Exide type designation	Part number	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
A406/165A	NGA4060165HS0CA	389	300	248	209	157	121	95.0	58.5	43.9	34.5	28.7	19.1	16.6
A412/5,5SR	NGA41205D5HS0RA	15.5	10.7	8.70	7.30	5.60	4.30	3.40	2.20	1.60	1.20	1.00	0.70	0.50
A412/8,5SR	NGA41208D5HS0RA	23.0	16.0	12.0	10.0	7.70	6.00	4.70	3.00	2.20	1.70	1.50	1.00	0.80
A412/12SR	NGA4120012HS0RA	30.0	22.0	17.0	14.0	11.0	9.00	6.80	4.00	2.90	2.30	2.00	1.40	1.20
A412/20G5	NGA4120020HS0BA	56.0	40.0	31.0	25.0	19.0	15.0	12.0	7.00	5.00	4.00	3.30	2.20	2.00
A412/32G6	NGA4120032HS0BA	94.0	65.0	52.0	43.0	33.0	25.0	20.0	12.0	8.90	7.00	5.80	3.90	3.20
A412/50G6	NGA4120050HS0BA	133	98.0	79.0	66.0	50.0	39.0	31.0	19.0	13.6	10.7	8.90	6.00	5.00
A412/65G6	NGA4120065HS0BA	161	114	91.0	75.0	57.0	49.0	42.0	24.0	17.3	13.7	11.5	7.70	6.50
A412/85F10	NGA4120085HS0FB	210	159	134	110	84.0	65.0	52.0	32.0	22.8	17.9	14.9	10.0	8.50
A412/90A	NGA4120090HS0CA	225	172	142	116	88.0	67.0	53.0	33.0	24.5	19.0	16.3	11.0	9.00
A412/100A	NGA4120100HS0CA	232	178	146	120	90.0	68.0	54.0	34.0	25.3	19.5	17.0	11.4	10.0
A412/120A	NGA4120120HS0CA	311	217	169	142	111	91.0	71.0	41.0	29.4	23.4	19.6	13.2	12.0
A412/180A	NGA4120180HS0CA	399	305	250	212	159	122	96.0	64.0	46.0	36.4	30.4	20.2	18.0
1.60 VpC - Discharge in A at 20 °C														
Exide type designation	Part number	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
A406/165A	NGA4060165HS0CA	422	318	256	215	160	122	96.0	59.0	44.0	34.6	28.7	19.1	16.6
A412/5,5SR	NGA41205D5HS0RA	16.1	11.0	8.90	7.50	5.60	4.40	3.40	2.20	1.60	1.20	1.00	0.70	0.50
A412/8,5SR	NGA41208D5HS0RA	24.0	16.0	13.0	10.0	7.80	6.00	4.80	3.00	2.20	1.70	1.50	1.00	0.80
A412/12SR	NGA4120012HS0RA	33.0	23.0	17.0	14.0	11.0	9.00	6.80	4.00	2.90	2.30	2.00	1.40	1.20
A412/20G5	NGA4120020HS0BA	60.0	42.0	31.0	26.0	19.0	15.0	12.0	7.00	5.00	4.00	3.30	2.20	2.00
A412/32G6	NGA4120032HS0BA	101	68.0	54.0	44.0	33.0	25.0	20.0	12.0	8.90	7.00	5.80	3.90	3.20
A412/50G6	NGA4120050HS0BA	144	101	81.0	67.0	51.0	40.0	31.0	19.0	13.6	10.7	8.90	6.00	5.00
A412/65G6	NGA4120065HS0BA	170	116	92.0	76.0	58.0	49.0	42.0	24.0	17.3	13.8	11.5	7.70	6.50
A412/85F10	NGA4120085HS0FB	229	166	137	113	85.0	66.0	52.0	32.0	22.8	18.0	14.9	10.0	8.50
A412/90A	NGA4120090HS0CA	245	177	145	118	89.0	68.0	54.0	34.0	24.5	19.0	16.3	11.0	9.00
A412/100A	NGA4120100HS0CA	253	183	149	121	91.0	69.0	54.0	34.0	25.4	19.6	17.0	11.4	10.0
A412/120A	NGA4120120HS0CA	333	228	175	146	112	91.0	71.0	41.0	29.5	23.4	19.6	13.2	12.0
A412/180A	NGA4120180HS0CA	439	322	258	217	162	123	96.0	64.0	46.1	36.4	30.4	20.2	18.0

1.85 VpC - Discharge in W/Block at 20 °C													
Exide type designation	Part number	2 min	3 min	5 min	7 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h
A406/165A	NGA4060165HS0CA	1310	1263	1171	1096	1005	875	798	690	543	459	293	222
A412/5,5SR	NGA41205D5HS0RA	153	141	120	106	95.0	80.0	69.0	58.0	44.0	36.0	22.0	16.0
A412/8,5SR	NGA41208D5HS0RA	216	201	176	159	141	117	102	84.0	65.0	54.0	31.0	22.0
A412/12SR	NGA4120012HS0RA	252	239	219	203	185	157	141	115	89.0	75.0	38.0	29.0
A412/20G5	NGA4120020HS0BA	438	414	378	348	302	257	229	195	151	126	71.0	51.0
A412/32G6	NGA4120032HS0BA	680	634	580	532	483	414	366	304	234	194	128	92.0
A412/50G6	NGA4120050HS0BA	1149	1075	1002	949	876	785	699	590	458	376	193	139
A412/65G6	NGA4120065HS0BA	1440	1342	1221	1137	1025	867	759	635	482	396	239	175
A412/85F10	NGA4120085HS0FB	1311	1275	1230	1158	1071	953	865	761	592	495	324	233
A412/90A	NGA4120090HS0CA	1686	1620	1493	1374	1243	1080	987	828	647	543	332	246
A412/100A	NGA4120100HS0CA	1873	1792	1625	1482	1329	1144	1048	861	674	567	335	252
A412/120A	NGA4120120HS0CA	2418	2254	1964	1773	1575	1385	1272	1109	914	745	410	300
A412/180A	NGA4120180HS0CA	3475	3324	3112	2959	2679	2284	2011	1563	1215	1016	632	467
1.80 VpC - Discharge in W/Block at 20 °C													
Exide type designation	Part number	2 min	3 min	5 min	7 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h
A406/165A	NGA4060165HS0CA	1622	1548	1414	1315	1184	1020	901	769	596	494	318	241
A412/5,5SR	NGA41205D5HS0RA	174	161	140	122	106	88.0	74.0	62.0	47.0	38.0	24.0	17.0
A412/8,5SR	NGA41208D5HS0RA	246	232	204	180	156	130	111	90.0	69.0	56.0	33.0	24.0
A412/12SR	NGA4120012HS0RA	314	292	258	235	208	177	153	125	96.0	79.0	42.0	31.0
A412/20G5	NGA4120020HS0BA	566	521	467	421	359	292	252	208	160	131	77.0	55.0
A412/32G6	NGA4120032HS0BA	826	764	677	622	562	468	403	332	252	207	135	98.0
A412/50G6	NGA4120050HS0BA	1385	1269	1135	1041	969	862	770	626	493	400	210	151
A412/65G6	NGA4120065HS0BA	1702	1601	1430	1296	1158	977	834	690	516	420	260	190
A412/85F10	NGA4120085HS0FB	1667	1573	1463	1375	1276	1082	960	804	637	527	352	253
A412/90A	NGA4120090HS0CA	1940	1848	1706	1554	1395	1185	1062	891	692	574	360	267
A412/100A	NGA4120100HS0CA	2076	1986	1828	1644	1454	1236	1112	935	719	597	364	274
A412/120A	NGA4120120HS0CA	2958	2668	2286	2027	1769	1496	1346	1146	971	802	446	326
A412/180A	NGA4120180HS0CA	4109	3898	3559	3336	3012	2595	2241	1756	1339	1105	687	507
1.75 VpC - Discharge in W/Block at 20 °C													
Exide type designation	Part number	2 min	3 min	5 min	7 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h
A406/165A	NGA4060165HS0CA	1850	1781	1629	1493	1356	1146	981	797	623	512	337	247
A412/5,5SR	NGA41205D5HS0RA	196	178	155	134	114	93.0	78.0	63.0	49.0	40.0	24.0	17.0
A412/8,5SR	NGA41208D5HS0RA	278	259	226	198	171	138	116	94.0	71.0	58.0	34.0	25.0
A412/12SR	NGA4120012HS0RA	355	331	296	262	233	193	164	131	99.0	81.0	45.0	33.0
A412/20G5	NGA4120020HS0BA	658	596	518	467	398	315	267	213	164	135	77.0	56.0
A412/32G6	NGA4120032HS0BA	959	881	776	691	613	509	431	350	263	215	139	99.0
A412/50G6	NGA4120050HS0BA	1591	1480	1293	1148	1032	923	819	653	511	413	215	152
A412/65G6	NGA4120065HS0BA	1968	1830	1620	1447	1268	1054	886	714	534	432	270	193
A412/85F10	NGA4120085HS0FB	1908	1826	1674	1532	1421	1200	1034	838	664	545	360	256
A412/90A	NGA4120090HS0CA	2301	2185	1984	1796	1564	1299	1128	927	716	590	375	272
A412/100A	NGA4120100HS0CA	2498	2364	2139	1928	1636	1348	1176	972	742	613	383	280
A412/120A	NGA4120120HS0CA	3453	3084	2593	2262	1940	1610	1387	1176	997	829	460	329
A412/180A	NGA4120180HS0CA	4556	4307	3950	3659	3316	2821	2399	1876	1414	1157	695	515

1.70 VpC - Discharge in W/Block at 20 °C													
Exide type designation	Part number	2 min	3 min	5 min	7 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h
A406/165A	NGA4060165HS0CA	1993	1913	1778	1636	1455	1230	1036	814	637	522	339	247
A412/5,5SR	NGA41205D5HS0RA	219	194	163	143	119	97.0	81.0	64.0	50.0	40.0	24.0	18.0
A412/8,5SR	NGA41208D5HS0RA	306	283	246	212	178	143	120	95.0	72.0	58.0	34.0	25.0
A412/12SR	NGA4120012HS0RA	394	366	323	286	247	203	170	135	101	82.0	45.0	33.0
A412/20G5	NGA4120020HS0BA	741	657	555	494	424	331	277	216	166	136	78.0	56.0
A412/32G6	NGA4120032HS0BA	1064	990	861	752	639	537	450	358	269	219	139	100
A412/50G6	NGA4120050HS0BA	1734	1584	1406	1234	1079	956	849	669	520	419	216	153
A412/65G6	NGA4120065HS0BA	2191	2009	1762	1570	1323	1100	916	723	541	437	270	194
A412/85F10	NGA4120085HS0FB	2076	1987	1837	1671	1510	1276	1084	862	679	554	362	256
A412/90A	NGA4120090HS0CA	2553	2398	2177	1950	1670	1368	1172	945	727	598	375	273
A412/100A	NGA4120100HS0CA	2792	2604	2347	2090	1749	1414	1216	987	752	620	385	282
A412/120A	NGA4120120HS0CA	3821	3501	2938	2497	2090	1699	1441	1195	1008	840	460	330
A412/180A	NGA4120180HS0CA	4990	4742	4298	3929	3477	2976	2503	1945	1455	1185	697	517
1.65 VpC - Discharge in W/Block at 20 °C													
Exide type designation	Part number	2 min	3 min	5 min	7 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h
A406/165A	NGA4060165HS0CA	2162	2055	1879	1734	1527	1278	1067	828	643	525	341	248
A412/5,5SR	NGA41205D5HS0RA	235	208	169	149	123	99.0	82.0	65.0	51.0	41.0	24.0	18.0
A412/8,5SR	NGA41208D5HS0RA	331	306	258	222	183	146	122	96.0	72.0	59.0	34.0	25.0
A412/12SR	NGA4120012HS0RA	436	399	348	304	255	209	174	136	102	83.0	45.0	33.0
A412/20G5	NGA4120020HS0BA	799	701	583	511	439	339	282	218	167	136	79.0	56.0
A412/32G6	NGA4120032HS0BA	1161	1069	916	801	667	554	462	362	273	221	139	100
A412/50G6	NGA4120050HS0BA	1931	1747	1480	1309	1120	991	866	677	524	422	217	153
A412/65G6	NGA4120065HS0BA	2419	2214	1874	1658	1371	1125	932	727	545	439	271	195
A412/85F10	NGA4120085HS0FB	2255	2139	1963	1770	1569	1326	1116	876	686	559	364	257
A412/90A	NGA4120090HS0CA	2824	2598	2305	2067	1744	1415	1200	954	732	601	376	274
A412/100A	NGA4120100HS0CA	3108	2827	2475	2216	1831	1459	1242	993	756	623	387	283
A412/120A	NGA4120120HS0CA	4111	3798	3170	2682	2194	1757	1474	1205	1012	845	460	331
A412/180A	NGA4120180HS0CA	5419	5099	4628	4163	3589	3074	2565	1978	1475	1198	700	518
1.60 VpC - Discharge in W/Block at 20 °C													
Exide type designation	Part number	2 min	3 min	5 min	7 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h
A406/165A	NGA4060165HS0CA	2351	2202	1987	1828	1588	1308	1086	836	646	527	342	249
A412/5,5SR	NGA41205D5HS0RA	248	220	175	153	125	100	83.0	65.0	51.0	41.0	24.0	18.0
A412/8,5SR	NGA41208D5HS0RA	354	325	267	228	187	148	123	97.0	72.0	59.0	34.0	25.0
A412/12SR	NGA4120012HS0RA	474	424	358	317	263	213	176	137	102	83.0	45.0	33.0
A412/20G5	NGA4120020HS0BA	874	760	610	521	447	343	285	219	168	136	80.0	56.0
A412/32G6	NGA4120032HS0BA	1245	1143	952	835	687	565	469	366	276	223	140	101
A412/50G6	NGA4120050HS0BA	2216	1989	1583	1363	1151	1001	875	682	526	423	218	154
A412/65G6	NGA4120065HS0BA	2603	2402	1962	1713	1400	1137	940	729	547	440	272	196
A412/85F10	NGA4120085HS0FB	2431	2280	2058	1868	1609	1357	1136	885	690	562	365	257
A412/90A	NGA4120090HS0CA	3046	2755	2398	2157	1793	1444	1217	961	736	604	377	275
A412/100A	NGA4120100HS0CA	3354	2992	2567	2301	1885	1488	1258	999	759	625	388	284
A412/120A	NGA4120120HS0CA	4297	3942	3330	2779	2260	1791	1494	1210	1014	847	460	332
A412/180A	NGA4120180HS0CA	5825	5395	4832	4361	3701	3130	2599	1994	1484	1204	702	519

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