

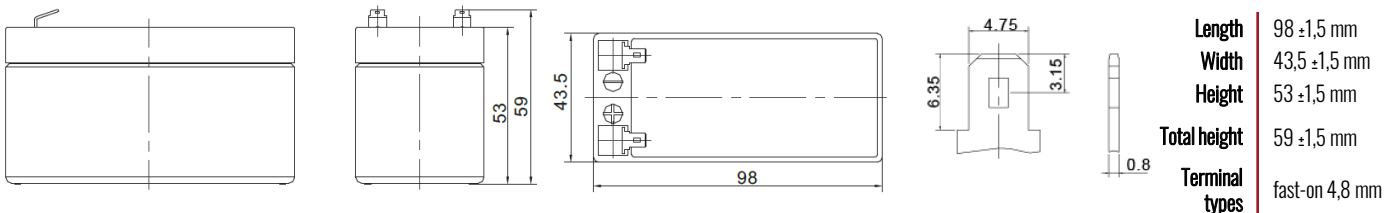


SB 1,3-12



Nominal voltage	12 V
Nominal capacity	1,3 Ah @ C20 to 1,75 V/cell
Technology	AGM (Absorbent Glass Mat) VRLA (Valve Regulated Lead Acid)
Weight	~ 0,52 kg
Design life time	6-9 years (standby use) General Purpose acc. Eurobat
Internal resistance	~ 95 mΩ (full charged)

Operating temperature range	Discharge -20°C ~ +60°C
	Charge 0°C ~ +50°C
	Storage -20°C ~ +60°C
Maximum discharge current	13 A (5 sek)
Maximum charging current	0,39 A
Charging voltage	Standby use 13,7 ~ 13,9 VDC
	Cycle use 14,6 ~ 14,8 VDC
Self discharge	Monthly is less than 3% at 25°C
Container material	ABS UL94HB (optional UL94-V0)



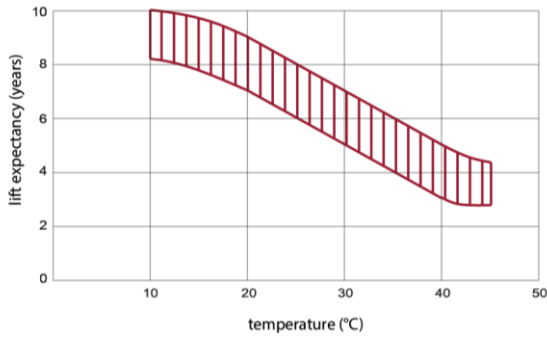
CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A at 25°C)

Voltage/Time	5MIN	10MIN	15MIN	30MIN	1H	2H	3H	4H	5H	8H	10H	20H
1.60 V	4,932	3,486	2,520	1,447	0,794	0,488	0,367	0,296	0,245	0,158	0,128	0,068
1.65 V	4,587	3,294	2,409	1,389	0,767	0,472	0,355	0,288	0,239	0,156	0,127	0,067
1.70 V	4,138	3,032	2,256	1,328	0,742	0,457	0,346	0,280	0,233	0,154	0,125	0,066
1.75 V	3,708	2,776	2,100	1,269	0,715	0,441	0,335	0,273	0,227	0,152	0,123	0,065
1.80 V	3,256	2,513	1,939	1,213	0,688	0,425	0,325	0,265	0,221	0,149	0,122	0,064
1.85 V	2,584	2,054	1,609	1,045	0,617	0,389	0,300	0,246	0,206	0,140	0,114	0,061

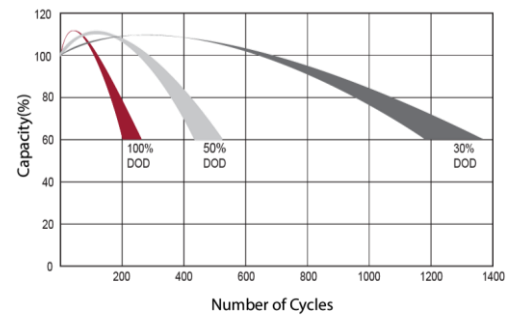
CONSTANT POWER DISCHARGE CHARACTERISTICS (W/cell at 25°C)

Voltage/Time	5MIN	10MIN	15MIN	30MIN	1H	2H	3H	4H	5H	8H	10H	20H
1.60 V	8,176	5,925	4,405	2,629	1,493	0,924	0,700	0,568	0,473	0,308	0,252	0,133
1.65 V	7,691	5,707	4,274	2,550	1,450	0,899	0,681	0,555	0,462	0,305	0,249	0,131
1.70 V	7,097	5,351	4,063	2,462	1,411	0,874	0,666	0,542	0,452	0,301	0,246	0,130
1.75 V	6,500	4,986	3,836	2,377	1,368	0,848	0,649	0,530	0,442	0,298	0,243	0,128
1.80 V	5,829	4,592	3,592	2,295	1,323	0,821	0,631	0,517	0,432	0,293	0,240	0,127
1.85 V	4,724	3,820	3,023	1,996	1,194	0,757	0,586	0,482	0,404	0,276	0,226	0,121

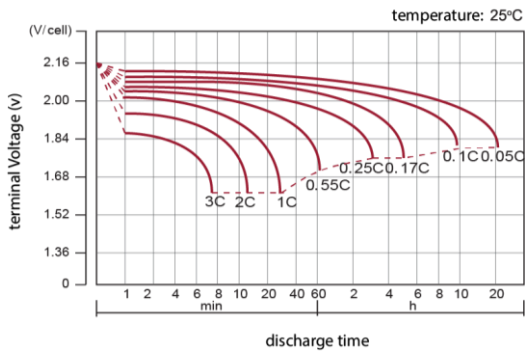
EFFECT OF TEMPERATURE ON LONG TERM LIFE



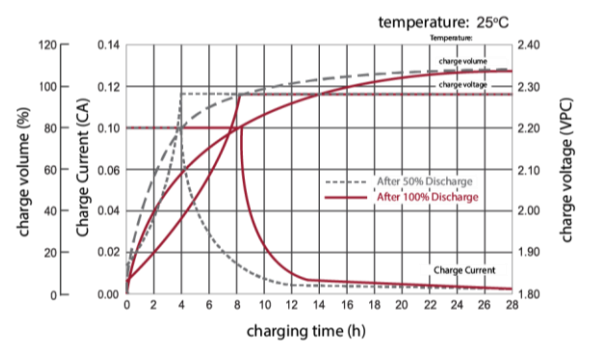
CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



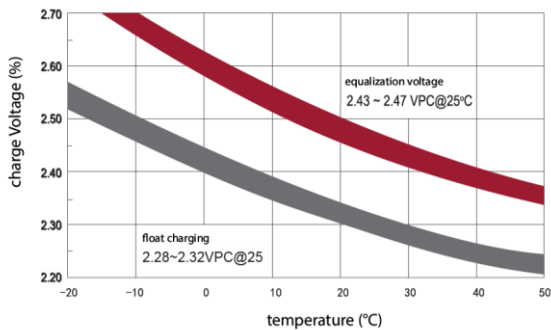
DISCHARGE CHARACTERISTICS CURVE



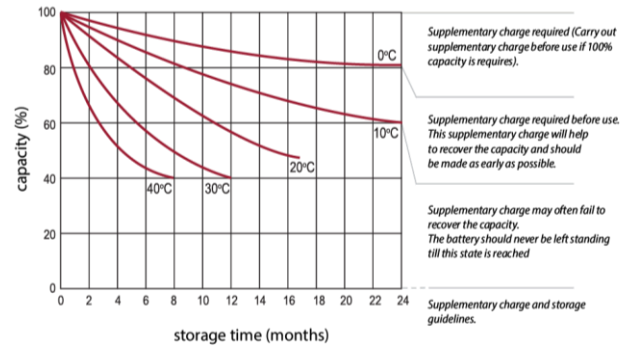
CHARGE CHARACTERISTIC CURVE FOR CYCLE USE



RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



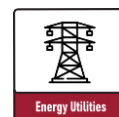
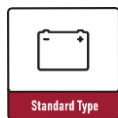
STORAGE CHARACTERISTICS



Standards met:

PN-EN 60896-21:2007 • PN-EN 60896-22:2007 • PN-EN 61056-1:2013 • PN-EN 61056-2:2013 • PN-E-83016:1999

Batteries manufactured in compliance with: ISO 9001 • ISO 14001



All data contained in this document, are subject to change. Wamtechnik Sp. z o.o. reserves the right to change them without prior notice.

Wamtechnik Sp. z o.o. ul. Techniczna 2 bud. H 05-500 Piaseczno
Tel. +48 22 701 26 00, office@wamtechnik.pl, www.wamtechnik.pl