

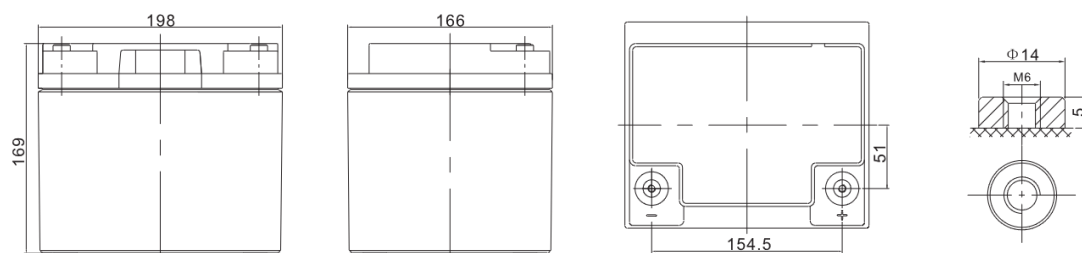


# SBL 45-12i



Nominal voltage	12 V
Nominal capacity	47,6 Ah @ C20 to 1,75 V/cell
	45 Ah @ C10 to 1,80 V/cell
Technology	AGM (Absorbent Glass Mat)
	VRLA (Valve Regulated Lead Acid)
Weight	~ 13,5 kg
Design life time	12 years (standby use)
	Long Life acc. Eurobat
Internal resistance	~ 9 mΩ (full charged)

Operating temperature range	Discharge -20°C ~ +60°C
	Charge 0°C ~ +50°C
	Storage -20°C ~ +60°C
Max. discharge current	450 A (5 sec)
Short circuit current	1050 A
Max. charging current	13,5 A
Charging voltage	Standby use 13,6 ~ 13,8 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)



Length	198 ±2 mm
Width	166 ±2 mm
Height	169 ±2 mm
Total height	169 ±2 mm
Internal thread M6 (breaking torque 8-10Nm)	

## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A at 25°C)

Voltage / Time	10 MIN	15 MIN	30 MIN	60 MIN	2 H	3 H	4 H	5 H	8 H	10 H	20 H
1.60 V	109,8	83,4	49,3	27,5	16,4	12,7	10,0	8,5	5,71	4,75	2,48
1.65 V	103,8	79,8	47,3	26,6	15,9	12,3	9,7	8,3	5,64	4,69	2,44
1.70 V	95,5	74,7	45,2	25,7	15,3	12,0	9,4	8,1	5,55	4,62	2,41
1.75 V	87,5	69,5	43,2	24,7	14,8	11,6	9,2	7,9	5,48	4,56	2,38
1.80 V	79,2	64,2	41,3	23,8	14,3	11,3	8,9	7,7	5,38	4,50	2,36
1.85 V	64,7	53,3	35,6	21,3	13,1	10,4	8,3	7,1	5,05	4,24	2,24

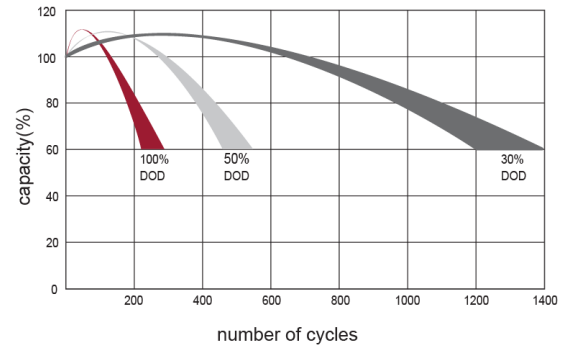
## CONSTANT POWER DISCHARGE CHARACTERISTICS (W/cell at 25°C)

Voltage / Time	10 MIN	15 MIN	30 MIN	60 MIN	2 H	3 H	4 H	5 H	8 H	10 H	20 H
1.60 V	190,7	146,2	89,5	53,1	32,3	24,2	19,5	16,5	11,18	9,57	4,92
1.65 V	189,9	145,4	87,3	52,7	32,0	23,7	19,3	16,4	11,10	9,50	4,89
1.70 V	184,3	141,5	85,2	51,5	31,5	23,3	19,1	16,2	10,97	9,38	4,84
1.75 V	177,4	136,7	82,6	50,1	30,8	22,9	18,7	15,9	10,79	9,23	4,77
1.80 V	167,3	129,7	78,9	48,0	29,8	22,2	18,2	15,5	10,54	9,03	4,69
1.85 V	153,4	120,1	73,9	45,4	28,5	21,3	17,5	15,0	10,21	8,76	4,57

EFFECT OF TEMPERATURE ON LONG TERM LIFE



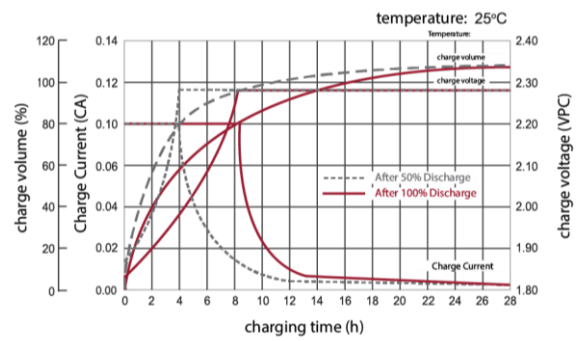
CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



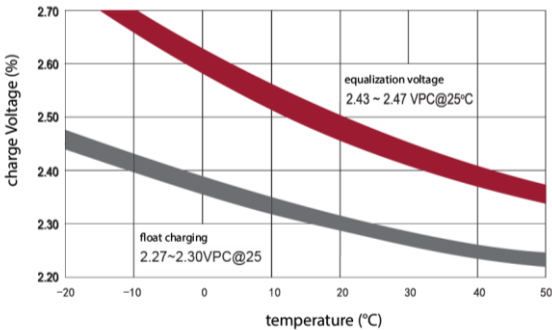
DISCHARGE CHARACTERISTICS CURVE



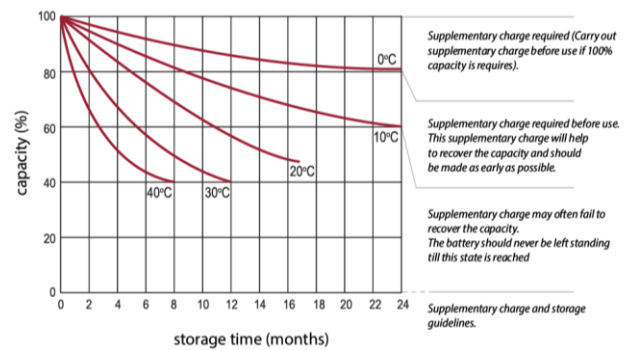
CHARGE CHARACTERISTIC CURVE FOR CYCLE USE



RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



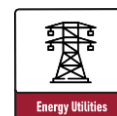
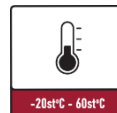
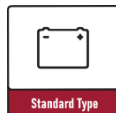
STORAGE CHARACTERISTICS



**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.