

BCL Series - Valve Regulated Lead Acid Battery

BCL 50-12

TECHNICAL DATA

BASIC DATA

Rated voltage	12	V
20hr capacity at end voltage 1,75V/cell at 25°C	50	Ah
Internal resistance (fully charged battery at 25°C)	5	mΩ

DIMENSIONS

Length	199(±1)	mm
Width	166(±1)	mm
Height	171(±1)	mm
(Height with terminals)	171(±1)	mm
Weight	15,10	kg

TERMINALS

INSERT TERMINAL	M6	-
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OPERATION TEMPERATURE RANGE

Storage	-15°C to +40°C
Charge	-15°C to +40°C
Discharge	-15°C to +50°C

STORAGE

Selfdischarge after 3 months at 20°C	6	%
Selfdischarge after 6 months at 20°C	15	%
Selfdischarge after 12 months at 20°C	37	%

CASE MATERIAL

Standard	ABS (UL 94:HB)
Flame retardant	ABS (UL94:V0)

CHARGE VOLTAGE

Float charge at 25°C	13,65 V ± 0,18 V
Cycle charge at 25°C	14,70 V ± 0,30 V

CHARGE CURRENT

Recommended	5	A
Maximum	15	A

MAX. DISCHARGE CURRENT

5 sec.	600	A
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DESIGNED LIFE

Bpower designed life at 25°C	up to 8	years
At 20°C according to Eurobat - General Purpose group	10 - 12	years

CYCLE LIFE

At 100% D.O.D.	300	cycles
At 50% D.O.D.	700	cycles

PHOTO



APPLICATIONS

- wheelchair
- cleaning machines
- boats
- photovoltaic systems
- mobile devices
- devices powered by an electric motor
- devices with high cyclical work

SAFETY



DISCHARGE CHARACTERISTICS

• Constant (Current [A], 25 [°C])

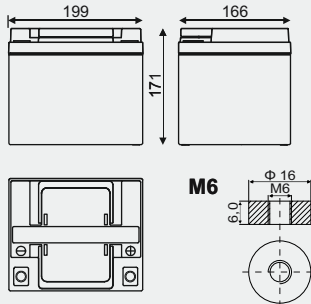
F.V. V/cell	5 min	10 min	15 min	30 min	1h	2h	3h	4h	5h	10h	20h
1,85	136	86,7	76,2	44,5	25,5	15,1	11,0	8,96	7,85	4,41	2,32
1,80	163	104	82,8	49,7	28,2	16,2	11,7	9,44	8,26	4,65	2,44
1,75	181	115	85,8	51,7	29,3	16,8	12,1	9,70	8,50	4,76	2,50
1,70	195	123	88,4	53,3	30,0	17,3	12,4	9,89	8,67	4,82	2,55
1,65	206	128	90,0	54,4	30,5	17,7	12,6	10,1	8,80	4,87	2,59
1,60	210	131	91,0	55,1	30,8	17,9	12,7	10,2	8,87	4,91	2,61

• Constant power (Power [W/cell], 25 [°C])

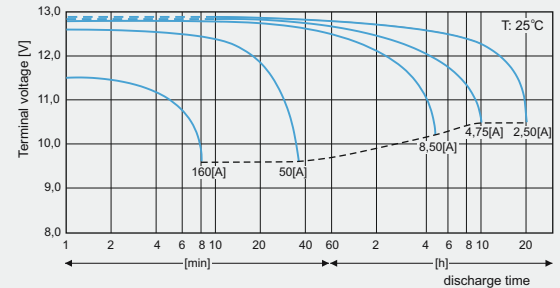
F.V. V/cell	5 min	10 min	15 min	30 min	1h	2h	3h	4h	5h	10h	20h
1,85	235	168	124	76,4	52,6	29,2	20,8	17,2	15,9	8,62	5,58
1,80	282	199	143	88,0	55,4	32,0	22,7	18,3	16,6	9,10	4,87
1,75	316	218	157	95,2	57,0	33,3	23,8	19,0	17,0	9,38	5,05
1,70	338	228	163	98,3	58,3	34,5	24,7	19,7	17,3	9,57	5,17
1,65	348	237	169	101	59,5	35,3	25,3	20,2	17,7	9,68	5,25
1,60	354	241	171	102	59,9	35,8	25,7	20,5	17,8	9,77	5,30

F.V. - Final Voltage

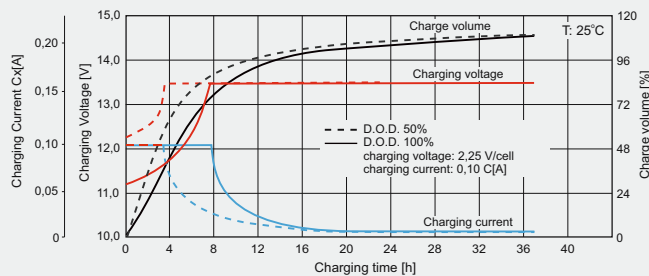
DIMENSIONS/TERMINALS



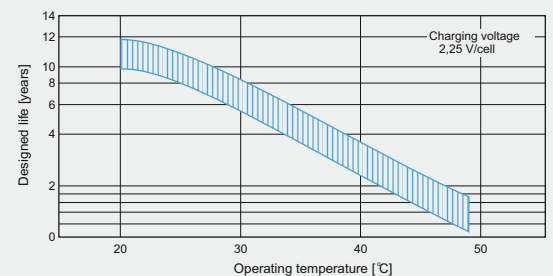
DISCHARGE CHARACTERISTICS



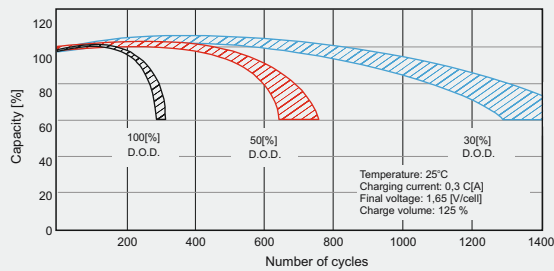
CHARGE CHARACTERISTICS



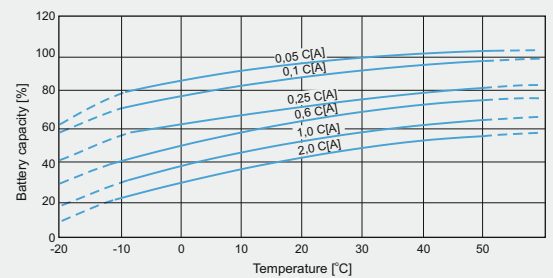
FLOAT LIFE



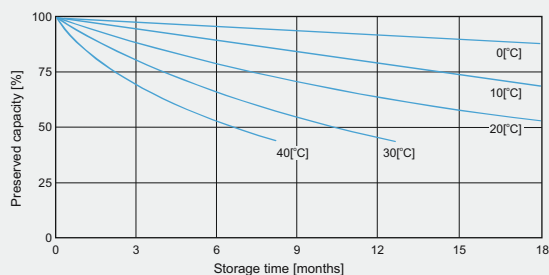
CYCLIC LIFE



CAPACITY VS. TEMPERATURE



SELFDISCHARGE CHARACTERISTICS



ENVIROMENTAL INFORMATION

EXPLOITED BATTERIES ARE CONSIDERED AS HAZARDOUS WASTE. THESE WASTES DUE TO THEIR ORIGIN, CHEMICAL COMPOSITION (THEY CONTAINS HEAVY METALS LIKE LEAD AND OTHER TOXIC SUBSTATIONS) AND OTHER FEATURES MAY BE DANGEROUS FOR ENVIRONMENT AND HUMAN OR ANIMAL HEALTH LIFE.