

MWP 45-12

Compliance with standards:
 PN-EN 60896-21:2007
 PN-EN 60896-22:2007
 PN-EN 61056-1:2013-05
 PN-EN 61056-2:2013-05
 PN-E-83016:1999

MW Power cells of MWP Series are made in VRLA (AGM) technology and designed for use in emergency power systems and various applications requiring cyclic use. Possible use of these batteries include automation systems, UPS, energy source for mobile devices. For 50%

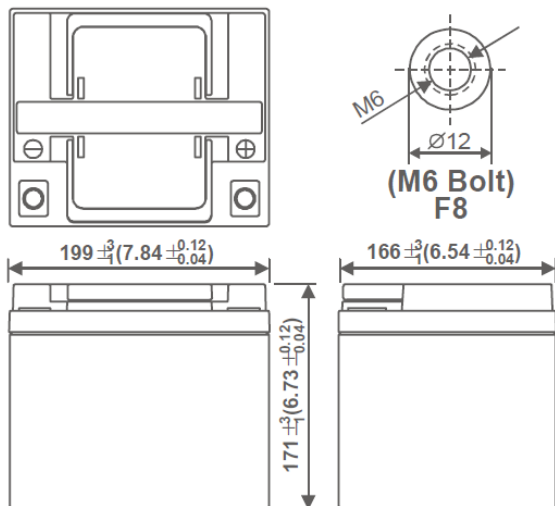
discharges MWP batteries can perform up to 600 charge-discharge cycles.

Designed service life is 12 years at working temperature of 20-25°C

Specification		
Nominal Voltage		12V
Nominal Capacity		45 Ah
Dimensions	Length	199 mm
	Width	166 mm
	Height	171mm
	Total height	171 mm
Weight		14,7 kg

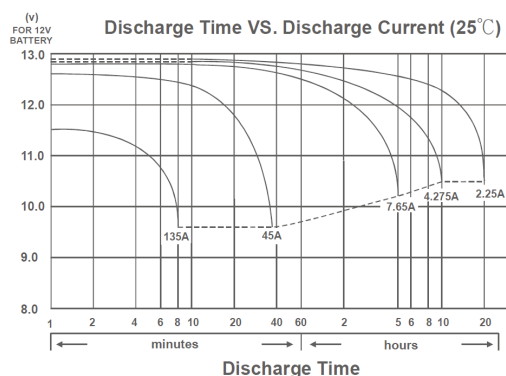


Dimensions mm (inches)



Recommended/max allowable torque value M6: 7Nm/9Nm

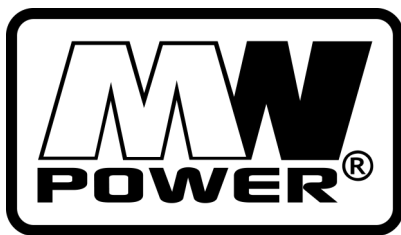
Discharge characteristics



Characteristics		
Capacity for 25°C and cut-off voltage 10,2V	20h	47,0 Ah
	10h	45,0 Ah
	5h	38,25 Ah
Internal resistance	Fully charged battery	7 mΩ
Capacity	20°C	100%
	0°C	85%
	-15°C	65%
Self-discharge	3 months	90%
	6 months	80%
	12 months	65%
Terminal / Case Material	M6/ ABS UL94 HB	
Charging	Standby use:	13,5-13,8 V
	Cycle use:	14,4-15,0 V
Max. charge current	13,5 A	
Max discharge current	540A / 5s	
Temperature:	Discharging	-20°C—50°C
	Charging	-20°C—50°C
	Storage	-20°C—50°C



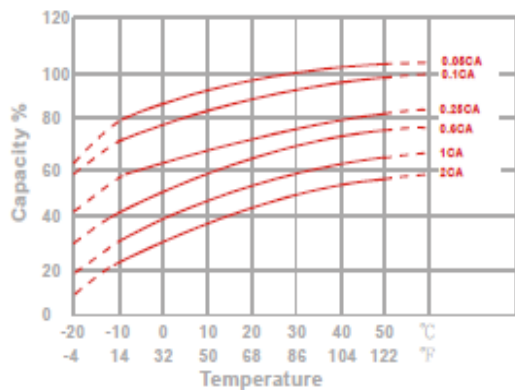
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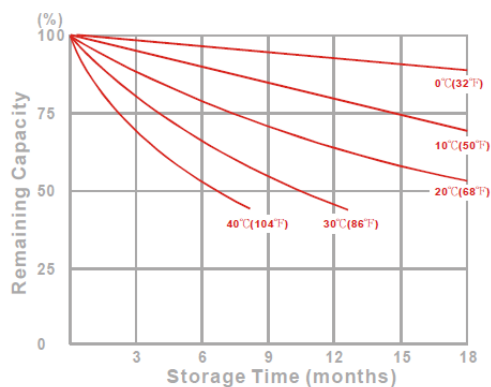
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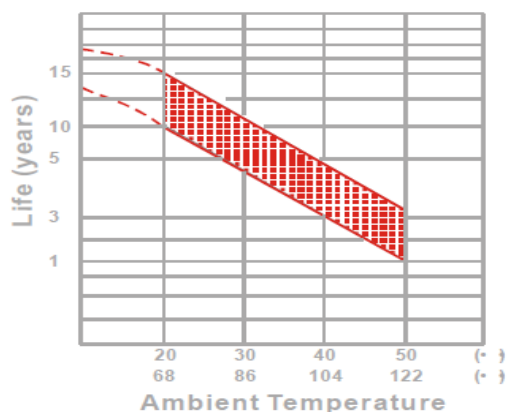
Temperature effect on capacity



Capacity Retention Characteristic



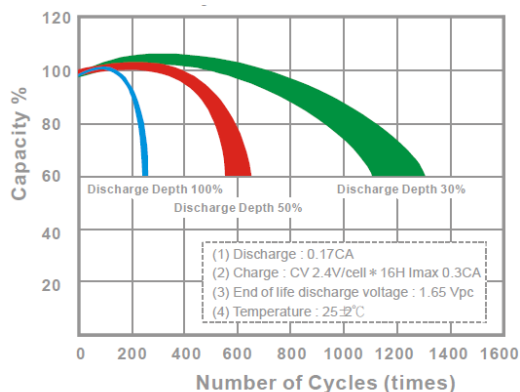
Service Life



Constant power discharge (Watt, 25°C)

Voltage	11,1 V	10,8 V	10,5 V	10,2 V	9,9 V	9,6V
5 min	1683	1884	2014	2048	2085	2122
10 min	1071	1199	1281	1303	1327	1350
15 min	816	901	955	969	985	1001
30 min	438	483	512	519	528	537
60 min	311	321	329	332	336	338
120 min	164	169	174	175	177	178
180 min	131	135	138	139	141	142
240 min	104	108	111	112	113	114
300 min	89,1	92,2	94,4	95,3	96,3	97,1
600 min	52,4	54,2	55,6	56,1	56,6	57,1
1200 min	27,6	28,6	29,3	29,6	29,9	30,1

Cycle Service Life



Constant current discharge (A, 25°C)

Voltage	11,1 V	10,8 V	10,5 V	10,2 V	9,9 V	9,6V
5 min	153	171	183	186	190	193
10 min	95,6	107	114	116	118	121
15 min	71	78,3	83,1	84,2	85,6	87
30 min	37,3	41,1	43,6	44,2	45	45,7
60 min	26,1	27	27,7	27,9	28,2	28,4
120 min	13,7	14,2	14,6	14,7	14,8	14,9
180 min	10,9	11,3	11,5	11,6	11,8	11,9
240 min	8,7	9	9,22	9,31	9,4	9,48
300 min	7,4	7,65	7,84	7,91	7,99	8,06
600 min	4,35	4,5	4,61	4,65	4,7	4,74
1200 min	2,28	2,36	2,42	2,44	2,47	2,49



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