

MWP 28-12h

Compliance with standards

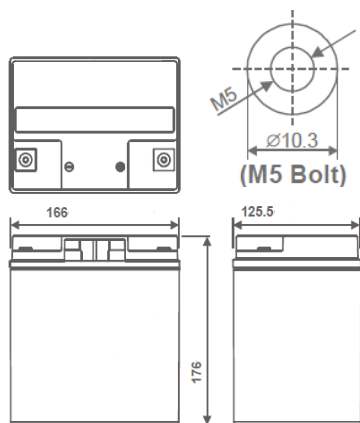
PN-EN 60896-21:2007
PN-EN 60896-22:2007
PN-EN 61056-1:2013-05
PN-EN 61056-2:2013-05
PN-E-83016:1999

MW Power batteries of the MWP series are made in the VRLA (AGM) technology and are intended for use in both emergency power systems and other applications where the battery operates cyclically. The preferred applications of this series of batteries are:

UPS emergency power supply, in automation systems and as an energy source in portable devices, powering motors and other devices in cyclic operation. For 50% discharge up to 600 work cycles. The design life is 12 years for 20-25°C.

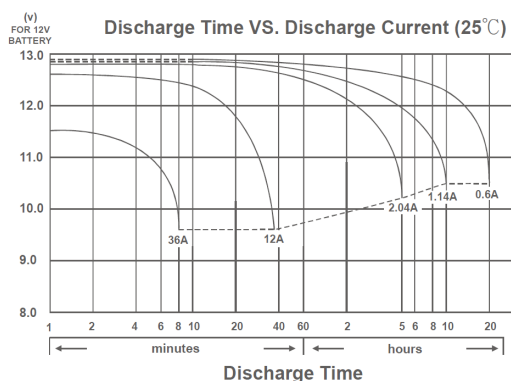
Specification		
Nominal voltage		12V
Nominal capacity		28 Ah
Dimensions	Length	166,0 mm
	Width	125,5 mm
	Height	176 mm
	Total height	176 mm
Weight		9,3 kg

Dimensions mm (inch)



Recommended / max. tightening torque M5: 5Nm / 6Nm

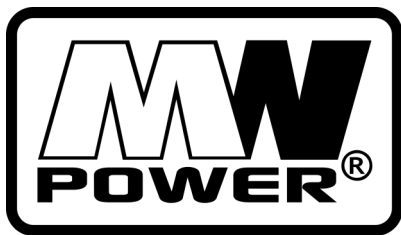
Discharge characteristics



Characteristic		
Capacity for 25 °C and a cut-off voltage of 10.2V	20h	28 Ah
	10h	26,5 Ah
	5h	24,8 Ah
Internal resistance	Battery charged	9,5 mΩ
Capacity	For 20°C	100%
	For 0°C	85%
	For -15°C	65%
Self-discharge	3 months	90%
	6 months	80%
	12 months	65%
Terminal / Housing	M5/ ABS UL94 HB	
Charging	Buffer	13,5-13,8 V
	Cyclical	14,4-15,0 V
Max charging current	8,4 A	
Max discharge current	420A / 5s	
Working temperatures	Discharge	-20°C—50°C
	Charging	-20°C—50°C
	Storage	-20°C—50°C



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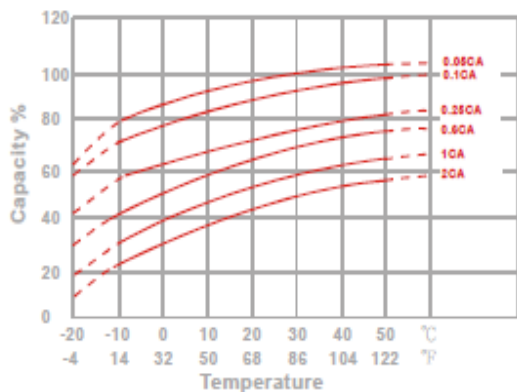


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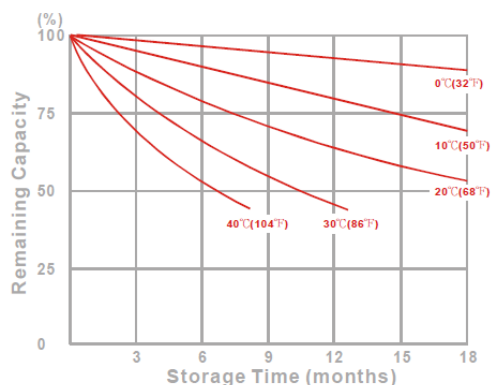
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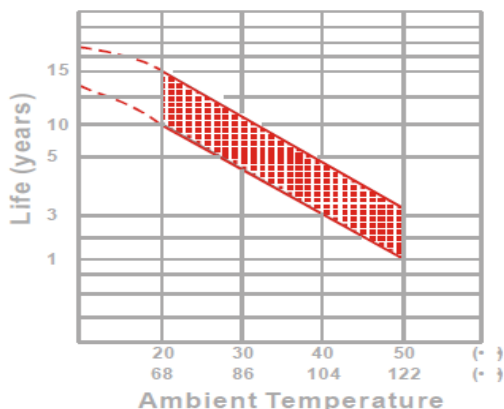
The influence of temperature on the capacity



Characteristics of the capacity decrease during storage



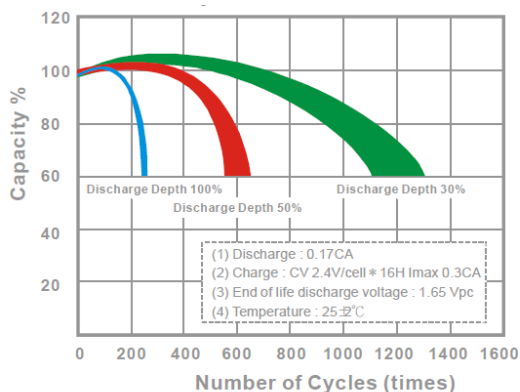
Battery life for buffer operation



Constant power discharge characteristic (Watt, 25 °C)

Tension	11,1 V	10,8 V	10,5 V	10,2 V	9,9 V	9,6V
5 min	880	918	984	1032	1098	1164
10 min	755	786	798	828	864	876
15 min	593	618	630	648	660	672
30 min	360	375	386	398	404	412
60 min	212	221	248	252	256	261
120 min	114	119	127	128	129	130
180 min	83	86	88,8	90	92	93
240 min	69	72	72,8	73,2	74	75
300 min	58,3	60,8	61,2	62	62,4	63,6
600 min	31	32	32,1	32,2	32,3	32,4
1200 min	16,2	16,8	16,9	17	17	17,1

Battery life for cyclic operation



Constant current discharge characteristic (A, 25 °C)

Tension	11,1 V	10,8 V	10,5 V	10,2 V	9,9 V	9,6V
5 min	80	83	88,5	93	99	105
10 min	68	70	71,2	73,5	76,8	78,3
15 min	52,2	53,6	54,7	56	57	58,1
30 min	31,1	32,2	33,3	34,1	34,9	36
60 min	17,4	18,7	21,2	21,7	22,2	22,9
120 min	9,8	10,2	10,7	10,8	10,9	11
180 min	6,82	7,11	7,42	7,52	7,62	7,73
240 min	5,69	5,92	5,97	6,20	6,31	6,42
300 min	4,8	4,98	5,11	5,15	5,2	5,22
600 min	2,58	2,62	2,66	2,67	2,68	2,69
1200 min	1,39	1,41	1,42	1,43	1,44	1,45



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