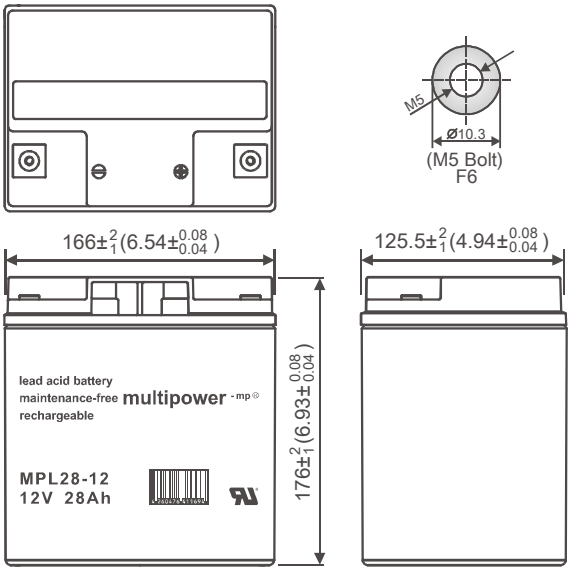
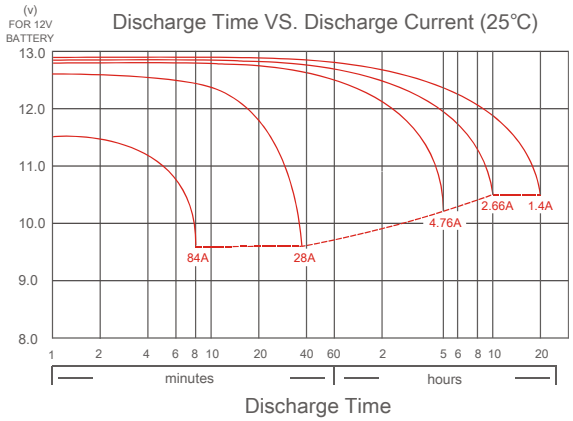
multipower

ACCU-24 BATTERIEN & SYSTEME GmbH

RECHARGEABLE SEALED LEAD ACID BATTERY **SPECIFICATION**





MPL28-12

Nominal Voltage (V) 12V

Nominal Capacity

20 hour rate	(1.4A	to	10.50V)	28.00Ah
10 hour rate	(2.66A	to	10.50V)	26.60Ah
5 hour rate	(4.76A	to	10.20V)	23.80Ah
1 C	(28A	to	9.60V)	17.73Ah
3 C	(84A	to	9.60V)	11.20Ah

Weight Approx. 9.18kg (20.2lbs.)

Internal Resistance (at 1KHz) Approx. 9.4 mΩ

Maximum Discharge Current for
5 seconds: 420A

Charging Methods at 25℃ (77℉)

Maximum Charging Current: 8.4A

Standby use:

Float Charging Voltage 13.50V to 13.80V

Coefficient -3.0mV/℃/cell

Operating Temperature Range

Charge	-15℃ (5℉)	to	40℃ (104℉)
Discharge	-15℃ (5℉)	to	50℃ (122℉)
Storage	-15℃ (5℉)	to	40℃ (104℉)

Charge Retention (shelf life) at 20℃ (68℉)

1 month	92%
3 month	90%
6 month	80%

Case Material ABS UL94 HB

Terminal F6

Description of torque value of hard ware for the terminals:

Recommended torque value	M5: 5 N-m (51kgf-cm)
Maximum allowable torque value	M5: 6 N-m (61kgf-cm)

Design Life

Eurobat (20℃) : 10+ years

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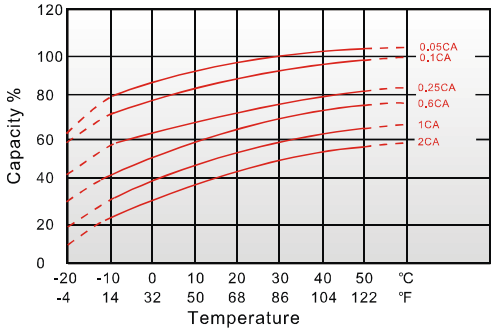
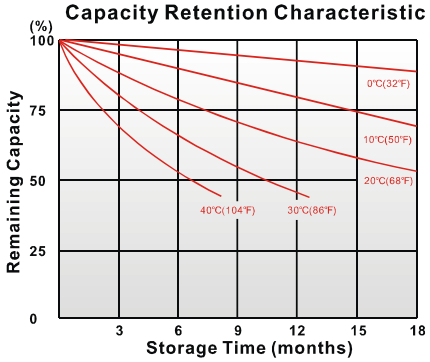
CHARACTERISTIC & PERFORMANCE DATA

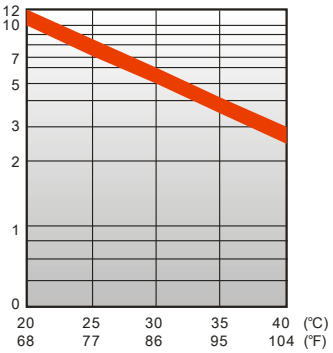
Effect of Temperature on Capacity 25℃(77℉)



Capacity Retention Characteristic



Trickle (or float) Service Life



- PERFORMANCE DATA

Discharge Rates in Watts per Cell to Various End Voltages at 25℃ (77℉)

Time \ End Voltage		1.85V	1.75V	1.70V	1.65V	1.60V
5	min	153	164	172	183	194
10	min	131	133	138	144	146
15	min	103	105	108	110	112
20	min	89.8	91.0	94.7	96.7	97.7
30	min	62.4	64.4	66.3	67.4	98.5
45	min	42.7	47.4	43.2	49.2	50.9
60	min	36.8	41.4	42.0	42.5	43.5
90	min	25.0	25.9	26.0	26.2	26.7
120	min	19.8	21.1	21.3	21.5	21.7
180	min	14.2	14.8	15.0	15.3	15.5
240	min	11.9	12.1	12.2	12.3	12.5
300	min	10.1	10.2	10.3	10.4	10.6
480	min	6.80	7.20	7.28	7.53	7.68
600	min	5.31	5.32	5.33	5.34	5.35
1200	min	2.81	2.82	2.83	2.84	2.85

- Discharge Rates in Amperes to per Battery Various End Voltages at 25℃(77℉)

Time \ End Voltage		1.85V	1.75V	1.70V	1.65V	1.60V
5	min	83.0	88.5	93.0	99.0	105
10	min	70.0	71.2	73.5	76.8	78.3
15	min	53.6	54.7	56.0	57.0	58.1
20	min	46.8	47.3	48.9	49.9	50.5
30	min	32.2	33.3	34.1	34.9	36.0
45	min	22.1	23.9	24.6	25.3	26.2
60	min	18.7	21.2	21.7	22.2	22.9
90	min	12.8	13.2	13.6	13.8	14.1
120	min	10.2	10.7	10.8	10.9	11.0
180	min	7.11	7.42	7.52	7.62	7.73
240	min	5.92	5.97	6.20	6.31	6.42
300	min	4.98	5.11	5.15	5.20	5.22
480	min	3.38	3.47	3.49	3.53	3.55
600	min	2.62	2.66	2.67	2.68	2.69
1200	min	1.41	1.42	1.43	1.44	1.45

All data on the spec. sheet is an average value:

The tolerance range : X<6min (+15%~-15%), 6min≦X<10min (+12%~-12%),10min ≦X < 60min (+8% ~-8%), X≧60min (+5%~-5%)

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