

BATTERIA RICARICABILE AL PIOMBO-CALCIO ERMETICA 12V - 7 Ah RECHARGEABLE HERMETICALLY - SEALED LEAD ACID BATTERY 12V - 7 Ah

ART. 30/06105-00 ART. 30/06106-00

Batterie al piombo YAMADA dalla ottima affidabilità, in tecnologia AGM (Absorbed Glass Mat) a ricombinazione interna di gas, senza emissioni di vapori acidi sia nell'uso a tampone, che nell'uso ciclico, esempio, apparecchiature portatili. Questa batteria non richiede manutenzione in quanto ermetica, e può essere installata all'interno delle apparecchiature elettroniche senza ulteriori accorgimenti, tranne il fatto che, nelle apparecchiature con all'interno qualsiasi tipo di batteria al piombo, il contenitore NON DEVE ESSERE ERMETICO. La singola cella di ogni batteria, è dotata di valvola di sicurezza unidirezionale, che garantisce lo smaltimento di eventuali sovrappressioni di gas interne, causate da un uso errato. Grazie alle ottime caratteristiche dei materiali impiegati per la produzione delle batterie YAMADA, la perdita di capacità in autoscarica è molto contenuta.

Per le caratteristiche costruttive delle batterie YAMADA il loro impiego è destinato prettamente al settore sicurezza e ascensoristico, ove non occorrono grandi correnti di scarica.

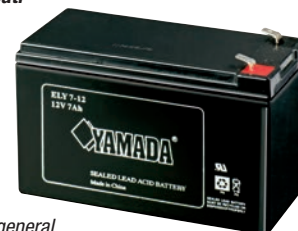
High performance AGM (Absorbed Glass Mat) lead acid battery that recombines the gases produced internally.

Highest quality, these batteries are acid emission-free for use in both cyclic (portable equipment) and float applications. It requires no maintenance because they're sealed and can be installed in the interior of electronic apparatus without additional protective measures, except that apparatus with internal batteries SHOULD NOT HAVE A SEALED CASE. Each single cell of the battery has a built-in unidirectional security valve in order to prevent gas overpressure due to misuse. Owing to their excellent materials used for the production of YAMADA batteries, self-discharge rate is really low.

Due to the constructional characteristics of the YAMADA batteries, their use is mainly intended for the safety and lift sector, where large discharge currents are not required.

USO IN PARALLELO O TAMPONE / Use in parallel or float:

Luci d'emergenza / Emergency lights
Sistemi di sicurezza / Security systems
Sistemi antincendio / Fire protection systems
Telecomunicazioni / Telecommunications
Settore ascensoristico / Elevator sector



USO CICLICO / Cyclic Use:

Apparecchiature portatili in genere / Portable equipment in general

DATI TECNICI TECHNICAL DATA

Tensione nominale	Voltage	12 V
Capacità nominale	Rating	7,0 Ah/20h
Capacità alle 5 ore	Rating-5 Hour	6,0 Ah
Capacità ad 1 ora	Rating-1 Hour	4,2 Ah
Max corrente di scarica	Max discharge current	40 A (5 sec.)
Tensione di carica a 20°	Charge voltage at 20°	14,5V-14,9V (Uso ciclico Cyclic) 13,6V-13,8V (Tampone Float)
Terminali	Terminals	30/06105-00 F1 Faston 4,8 mm 30/06106-00 F2 Faston 6,3 mm
Peso approssimativo	Approx. Weight	2,0 Kg

CURVE DI SCARICA A 25°C (77°F) DISCHARGE CURVES 25°C (77°F)

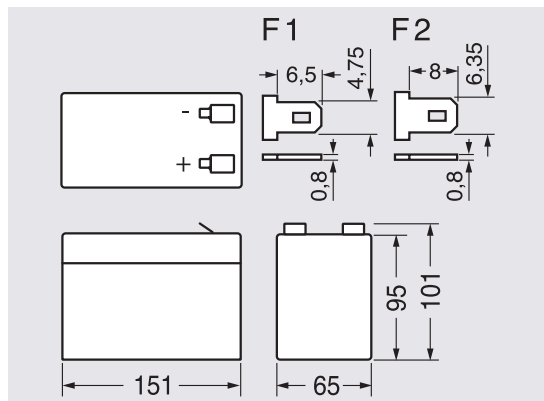
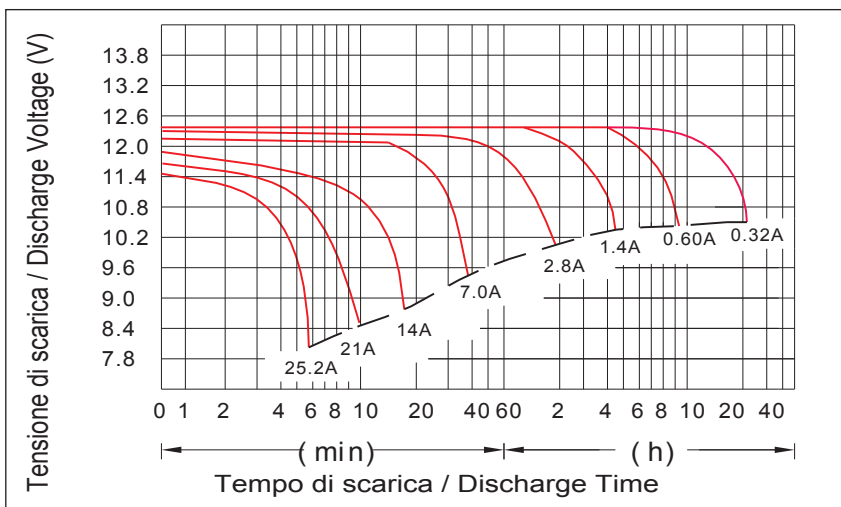


TABELLA DI SCARICA A 25°C IN AMPERE E IN WATT COSTANTI CONSTANT CURRENT (AMP) AND CONSTANT POWER (WATT) DISCHARGE TABLE AT 25°C (77°F)

Tempo / Time		5 min.	10 min.	15 min.	30 min.	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
9.60V	A	25.20	16.50	12.30	8.05	4.20	2.45	1.80	1.45	1.23	0.81	0.66	0.35
	W	262.00	177.00	131.00	86.60	45.40	26.90	20.10	16.30	14.00	9.29	7.65	4.21
10.20V	A	23.10	15.80	11.30	7.64	3.94	2.35	1.75	1.40	1.20	0.80	0.65	0.35
	W	248.00	177.00	126.00	85.8	44.60	27.10	20.30	16.30	14.00	9.32	7.64	4.14
10.50V	A	21.00	14.80	10.50	7.41	3.83	2.30	1.72	1.33	1.19	0.79	0.64	0.35
	W	231.00	168.00	120.00	85.30	44.20	26.70	20.10	15.60	14.00	9.26	7.62	4.14
10.80V	A	20.20	14.10	9.80	7.20	3.69	2.25	1.69	1.31	1.14	0.77	0.63	0.34
	W	227.00	163.00	113.00	85.50	42.90	26.30	19.90	15.40	13.40	9.09	7.45	4.06
11.10V	A	18.70	13.30	9.10	7.00	3.56	2.19	1.60	1.28	1.09	0.75	0.61	0.33
	W	212.00	154.00	106.00	81.90	41.80	25.90	19.10	15.30	13.00	8.94	7.39	4.03

BATERÍA RECARGABLE DE PLOMO-CALCIO HERMÉTICA 12V - 7 Ah RECHARGEABLE HERMETICALLY - SEALED LEAD ACID BATTERY 12V - 7 Ah

ART. 30/06105-00
ART. 30/06106-00

Baterías de plomo YAMADA de excelente fiabilidad, con tecnología AGM (Absorbed Glass Mat) de recombinación interna de los gases, sin emisiones de humos ácidos tanto en el modo respaldo como en el modo cíclico, como por ejemplo en equipos portátiles. Esta batería no requiere mantenimiento porque es hermética y se puede instalar en el interior de equipos electrónicos sin más cuidados, exceptuando el hecho de que, para los equipos con cualquier tipo de batería de plomo, el contenedor **NOTIENE QUE SER HERMÉTICO**. Cada celda de toda batería está equipada con una válvula de sobrepresión unidireccional, la cual garantiza la eliminación de posibles sobrepresiones internas de gases, causadas por una utilización incorrecta. Gracias a las características superiores de los materiales empleados en la fabricación de las baterías YAMADA, la pérdida de capacidad durante la autodescarga es muy limitada. Debido a las características constructivas de las baterías YAMADA, su uso está principalmente destinado al sector de seguridad y elevación, donde no se requieren grandes corrientes de descarga.

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Due to the constructional characteristics of the YAMADA batteries, their use is mainly intended for the safety and lift sector, where large discharge currents are not required.

UTILIZACIÓN EN PARALELO O RESPALDO:

Señales de emergencia
Sistemas de seguridad
Alarma de incendios
Telecomunicaciones
Sector de ascensores

UTILIZACIÓN CÍCLICA:

Equipos portátiles en general

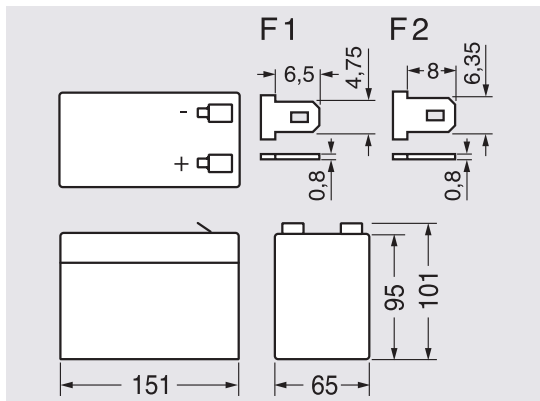
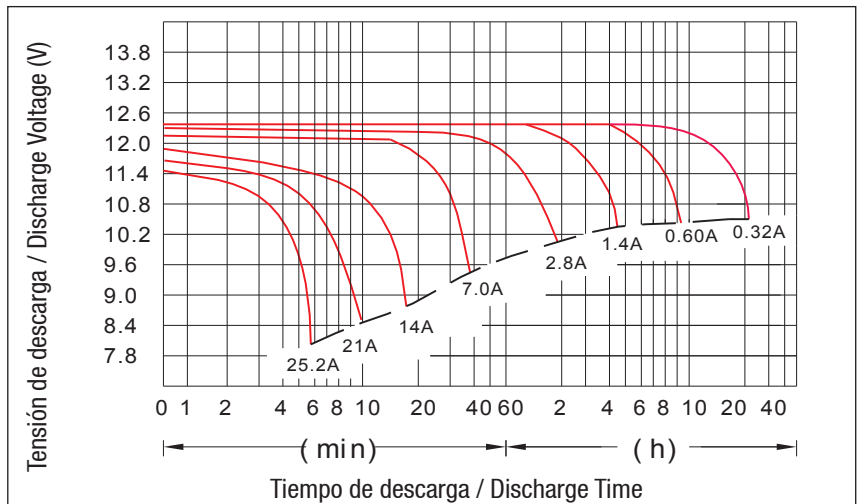


DATOS TÉCNICOS

TECHNICAL DATA

Tensión nominal	Voltage	12 V
Capacidad nominal	Rating	7,0 Ah/20h
Capacidad después de 5 horas	Rating-5 Hour	6,0 Ah
Capacidad después de 1 hora	Rating-1 Hour	4,2 Ah
Máx corriente de descarga	Max discharge current	40 A (5 sec.)
Tensión de carga a 20°	Charge voltage at 20°	14,5V-14,9V (Uso ciclico Cyclical) 13,6V-13,8V (Respaldo Float)
Bornes	Terminals	30/06105-00 F1 Faston 4,8 mm 30/06106-00 F2 Faston 6,3 mm
Peso aproximado	Approx. Weight	2,0 Kg

CURVAS DE DESCARGA A 25°C (77°F) DISCHARGE CURVES 25°C (77°F)



**TABLA DE DESCARGA A 25°C EXPRESADA EN AMPERIOS Y EN WATIOS CONSTANTES
CONSTANT CURRENT (AMP) AND CONSTANT POWER (WATT) DISCHARGE TABLE AT 25°C (77°F)**

Tiempo / Time		5 min.	10 min.	15 min.	30 min.	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
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	W	212.00	154.00	106.00	81.90	41.80	25.90	19.10	15.30	13.00	8.94	7.39	4.03

FIG.1

Autoscarica delle batterie in funzione della temperatura media di immagazzinaggio.
Self discharge characteristics at various (average) storage temperatures
Autodescarga de las baterías según la temperatura media de almacenamiento

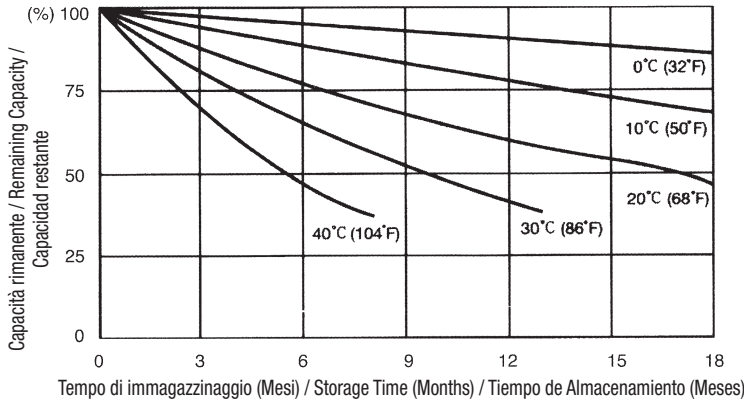


FIG.2

Immagazzinaggio in funzione di temperatura.
Self life at various temperatures
Almacenamiento según la temperatura.

Temperatura / Temperature / Temperatura	Autoscarica / Shelf life / Autodescarga
Da 0°C (32°F) a 20°C (68°F) From 0°C (32°F) to 20°C (68°F) De 0°C (32°F) a 20°C (68°F)	12 mesi 12 months 12 meses
Da 21°C (70°F) a 30°C (86°F) From 21°C (70°F) to 30°C (86°F) De 21°C (70°F) a 30°C (86°F)	9 mesi 9 months 9 meses
Da 31°C (88°F) a 40°C (104°F) From 31°C (88°F) to 40°C (104°F) De 31°C (88°F) a 40°C (104°F)	5 mesi 5 months 5 meses
Da 41°C (108°F) a 50°C (122°F) From 41°C (108°F) to 50°C (122°F) De 41°C (108°F) a 50°C (122°F)	2,5 mesi 2,5 months 2,5 meses

FIG.3

Valore della capacità residua in funzione delle tensione a vuoto.
Open circuit voltage vs. remaining capacity.
Valor de la capacidad residual en función de la tensión en vacío.

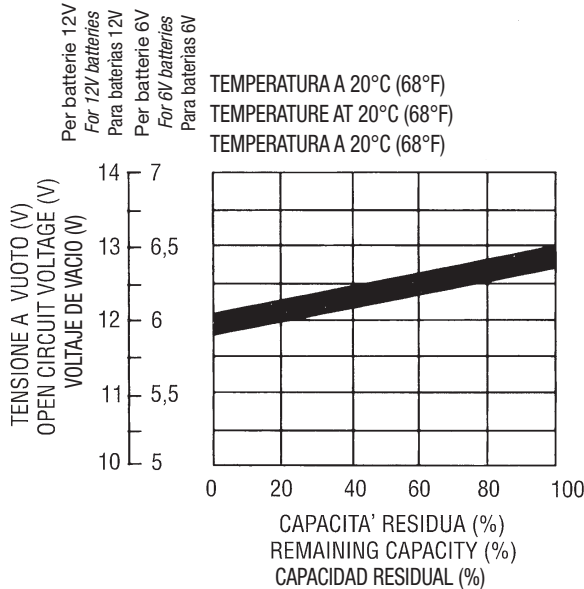


FIG.4

Metodi di carica supplementare durante l'immagazzinaggio.
Open circuit voltage vs. remaining capacity.
Modos de carga suplementaria durante el almacenamiento.

Temperatura di immagazzinaggio Storage Temperature Temperatura de Almacenamiento	Intervallo per una carica supplementare consigliata Recommended Supplementary Charge Interval Intervalo para una carga adicional recomendada	Metodo della carica supplementare Supplementary Charge Method Método de carga adicional
Sotto i 20°C (<68°F) Below 20°C (<68°F) Debajo 20°C (<68°F)	Dopo 10 mesi After 10 months Despues 10 meses	16-24 ore con tensione costante di 2,30V/cella 16-24 hours with a constant supply voltage of 2,30V per cell 16-24 horas con voltaje constante de 2,30V/cella
dai 20°C ai 30°C (68°F a 86°F) from 20°C to 30°C (68°F to 86°F) de 20°C a 30°C (68°F a 86°F)	Ogni 6 mesi Every 6 months Cada 6 meses	5-8 ore con tensione costante di 2,34V/cella 5-8 hours with a constant supply voltage of 2,34V per cell 5-8 horas con voltaje constante de 2,34V/cella
sopra 30°C (>86°F) over 30°C (>86°F) encima 30°C (>86°F)	È sconsigliato l'immagazzinaggio Storage NOT RECOMMENDED Almacenamiento no recomendado	5-8 ore con una corrente costante di 0,05A di C quando la capacità residua scende al 80% 5-8 hours with a constant current of 0,05A di C when remaining capacity is below 80% 5-8 horas con corriente constante de 0,05A di C cuando la capacidad restante se reduce a 80%

FIG.5

Numero di cicli in funzione della profondità di scarica.
Relationship between cycle service life and the depth of discharge.
Número de ciclos en función de la profundidad de la descarga.

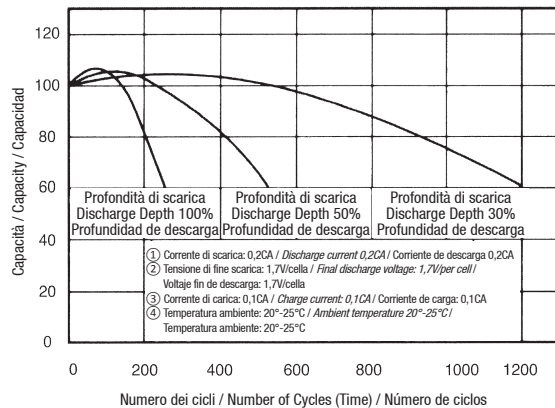


FIG.6A

Vita in tampone delle batterie da 0,8Ah to 18 Ah.
Float service life of battery from 0,8Ah to 18Ah.
Vida en modo respaldo de las baterías desde 0,8Ah hasta 18 Ah.

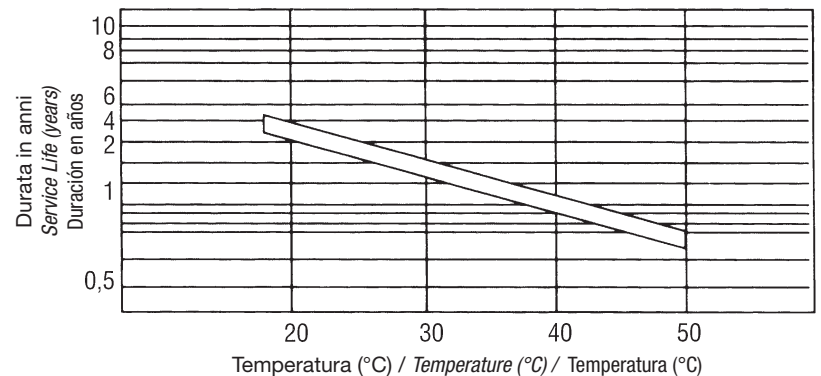


FIG.6B

Vita in tampone delle batterie da 26Ah a 200Ah
Float service life of battery from 26Ah to 200Ah
Vida en modo respaldo de las baterías desde 26Ah hasta 200 Ah.

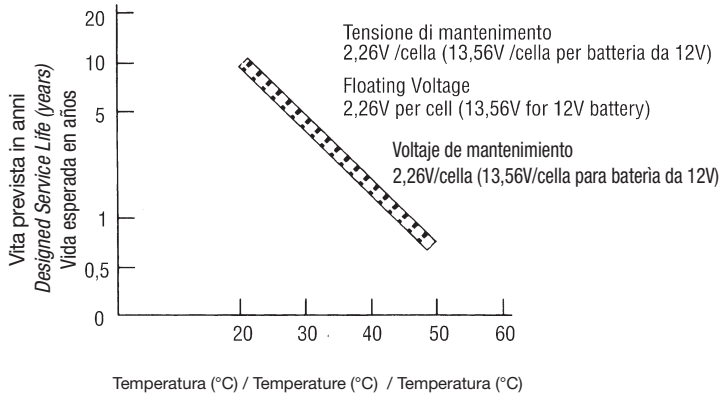


FIG.7

Tensione di alimentazione in funzione della temperatura media dell'ambiente.
Charging voltage in relation to average environmental temperature
Tensión de alimentación según la temperatura media del ambiente.

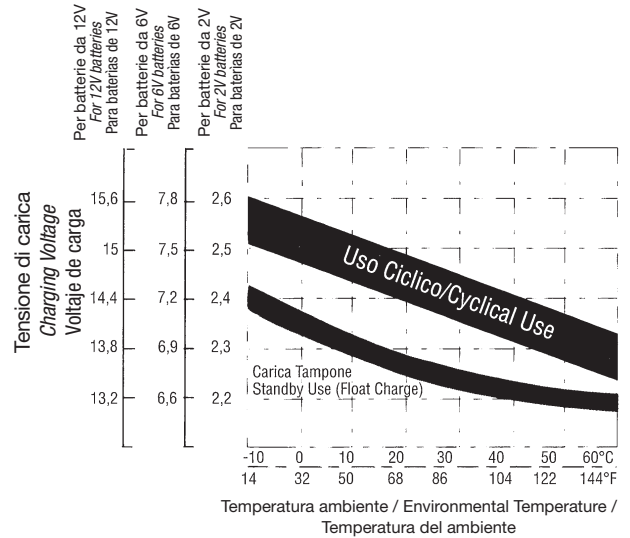


FIG.8

Curve di scarica per batterie da 0,8Ah a 18Ah
Discharge characteristics for battery from 0,8Ah to 18Ah
Curvas de descarga para baterías desde 0,8Ah hasta 18Ah

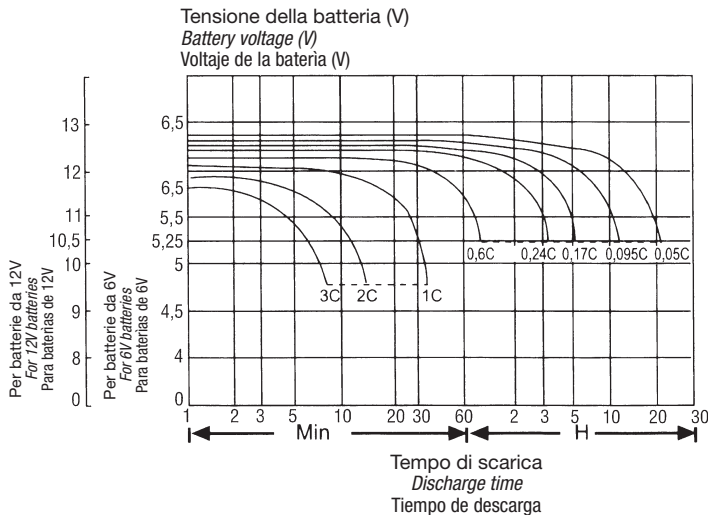


FIG.9

Curve di scarica per batterie da 26Ah a 200Ah
Discharge characteristics for battery from 26Ah to 200Ah
Curvas de descarga para baterías desde 26Ah hasta 200Ah

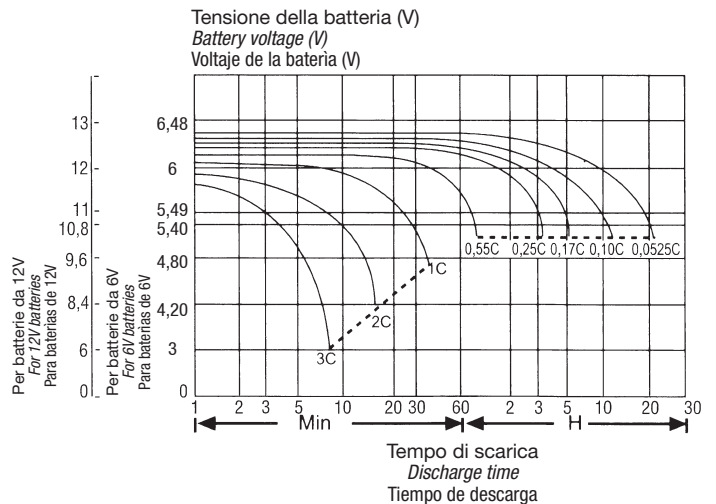


FIG.10

Rendimento delle batterie in funzione della temperatura media di lavoro.
Temperature and discharge capacity.
Rendimiento de las baterías según la temperatura media de trabajo.

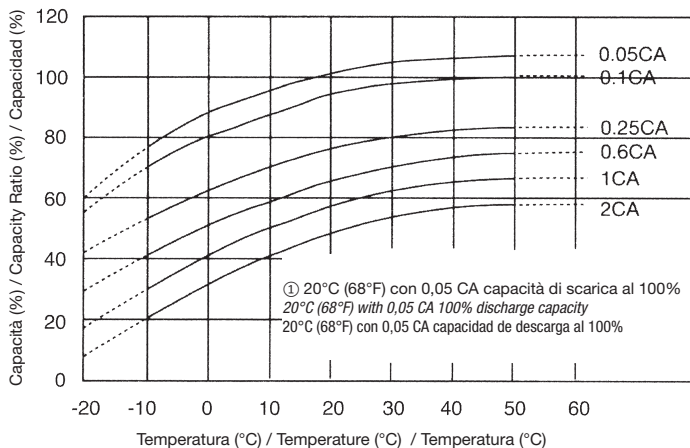


FIG.11

Tensione di fine scarica in funzione della corrente.
Discharge current and final discharge voltage.
Tensión de la descarga final según la corriente.

Corrente di scarica (A) Discharge Current (A) Corriente de descarga (A)	Tensione di fine scarica Voltaggio (V/cell) Final Discharge Voltage (V) per Cell Voltaje fin de descarga (V/cell)
(A) < 0.2C	1.75
0.2 < (A) < 1.0C	1.70
(A) > 1.0C	1.60