



**GREEN LIGHT TO USE  
WHEN YOU LIKE**

**Traction  
batteries**  
Hawker  
XFC FLEX™



**EnerSys**  
Power/Full Solutions

# Power: Just in Time

When you are not using it, charge it!



### **Transform the way of work – forever!**

The new Hawker XFC FLEX batteries will revolutionise the way you work. Designed using advanced Thin Plate Pure Lead Technology providing increased energy density and fast charge acceptance. XFC FLEX batteries with matched EnerSys HF charger can be used as and when required: use them as you want, and recharge whenever you can, during breaks and at the end of the shift.

### **Very rapid recharge**

The battery can even be put back into service before it is fully recharged.

Unlike conventional lead/acid batteries where you discharge to a specified level and then need to recharge for 8-12 hours, XFC FLEX is totally flexible giving increased autonomy to you.

### **New construction**

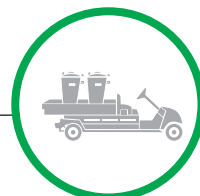
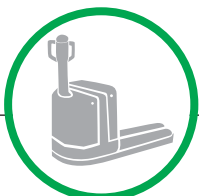
Advanced technology and robust construction delivering exceptional performance. XFC FLEX batteries are maintenance free. The electrolyte is absorbed in a superior quality micro-porous glass mat separator with high absorption and stability designed to enhance cyclic capability. Positive and negative plates are low impedance, high corrosion resistant thin plate grids (pure lead) manufactured using a unique

process. Containers are ABS, highly resistant to shock and vibration.

### **Many applications**

These batteries are suitable for use in small traction applications such as:

- Pallet trucks
- Floor care (cleaning machines)
- Shuttle personnel carriers
- Industrial utility vehicles (small refuse collection vehicles for example)
- And many other applications



## Totally revolutionary

The specific charging profile developed for recharging the Hawker XFC FLEX allows a rapid recharge in 3 hours at 60% DOD and opportunity charging as often as needed without damaging the batteries.



### A wide spectrum of high-lights

The new Hawker XFC FLEX has been designed optimising cycling performance as well as reducing the recharge time when combined with our approved charger. The state-of-the-art technology of these batteries allows superior performance and a long list of benefits compared to conventional lead acid batteries (gel or flooded).

### Customer benefits

- Opportunity charge whenever the truck is not being used, can eliminate the need for spare batteries & battery changing
- Short recharge time (less than 3 hours at 60% DOD, with approved charger)
- Suitable for multi-shift operations and optimises machine availability
- Totally maintenance-free, no topping-up
- 'Green' - reduced carbon footprint due to very low charge factor
- Reduced electricity costs for recharging due to very low charge factor
- Space saving: An XFC FLEX typically occupies 30% less space than an equivalent capacity battery of conventional design = more power for less space
- Excellent cycle life (up to 1,200 cycles at 60% DOD)
- High energy throughput (up to 300% of  $C_5$  per 24 hours-maximum DOD of 80% must be observed, please ask for further details for this application)
- Environmentally friendly
- Minimum gassing: ideal for use in shops, public areas and sensitive manufacturing areas
- XFC FLEX is available in single 12 V units or assembled batteries to suit various applications: pallet trucks, floor care, personnel and industrial electric trucks
- Easy installation in any orientation except inverted
- Increased shelf life (up to 2 years at 20°C)
- Highly recyclable

## Technical Data

Type	Voltage [V]	Nominal Capacity [Ah] C <sub>5</sub>	Nominal Capacity [Ah] C <sub>20</sub>	Dimensions [mm]				Weight* [kg]	Terminal	Terminal adapter	Terminal Layout
				L	W	Box Ht	Term. Ht				
12XFC25	12	25	29	250	97	147	144	9.6	M6 Female	SAE post	1
12XFC35	12	35	41	250	97	197	194	13.2	M6 Female	SAE post	1
12XFC48	12	48	54	220	121	252	248	18.7	M6 Female	SAE post	1
12XFC58	12	58	64	280	97	264	248	19.1	M8 Female	not applicable	2
12XFC60	12	60	63	329	166	174	166	24.2	M6 Female	SAE post	1
12XFC82	12	82	98	395	105	264	248	27.2	M8 Female	not applicable	2
12XFC158	12	158	179	561	125	283	263	51.5	M8 Female	M6 Male front terminal	2
12XFC177	12	177	202	561	125	317	297	59.6	M8 Female	M6 Male front terminal	2

\* +/-3%

### Terminal Layout

#### Layout 1



#### Layout 2



## General Specifications

### 24 V 158 Ah battery (1):

- Battery crate dimensions - 621 mm x 146 mm x 627 mm or 621 mm x 209 mm x 627 mm high
- Standard battery connector - Rema 80 A

Available as original equipment or replacement with matched charger

### 24 V 316 Ah battery (2):

- Battery crate dimensions - 621 mm x 281 mm x 627 mm high
- Standard battery connector - Rema 160 A (160 A to 80 A adaptor lead available as an option)

Available as original equipment or replacement with matched charger



(1)



(2)

The designated charging rate for XFC Flex is between 0.4 C<sub>5</sub> and 0.7 C<sub>5</sub> giving optimum performance, recharge time and cycle life.

Other ratings can be used with the agreement of EnerSys Technical.

Authority - please consult your local EnerSys Application Engineer for details.

For further details refer to Technical Data Lifetech XFC FLEX.

## Hawker XFC FLEX ... a step into the future of battery technology!



### European Headquarters:

**EnerSys EMEA**  
EH Europe GmbH  
Löwenstrasse 32  
8001 Zürich  
Switzerland  
Phone: +41 44 215 74 10  
Fax: +41 44 215 74 11

### Local contact:

**EnerSys Motive Power**  
Rake Lane  
Clifton Junction  
Swinton  
Manchester M27 8LR  
Phone: 0161 727 3800  
Fax: 0161 727 3899

Please refer to the website address for details of your nearest EnerSys office:  
[www.enersys-emea.com](http://www.enersys-emea.com)

© 2010. All rights reserved. All trademarks and logos are the property of or licensed to EnerSys and its affiliates unless otherwise noted.