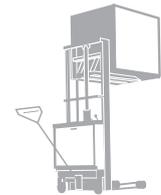

Small traction
**Hawker powerbloc/
powerbloc dry**



EnerSys

Power/Full Solutions™

HAWKER powerbloc/powerbloc dry

Hawker monoblocs are available in two technologies: Powerbloc are flooded batteries and Powerbloc Dry are gas recombination batteries. Both ranges can be recharged with Hawker 50 Hz or Hawker HF chargers. If you wish to use an existing charger you should check that the profile is approved by Hawker. Hawker HF chargers are equipped with microprocessors and ensure a reliable full recharge for any degree of discharge of the battery (max 80 %). These chargers have an electronically regulated characteristic charging curve. Charging process is automatically controlled and terminated. All chargers are protected against overload and short circuit.

Operation

To achieve optimal operating life avoid deep discharges. Never leave the battery in a discharged state. Electrolyte level for flooded batteries has to be checked regularly and then filled with demineralized water (DIN43530 part4) filled up to max. level mark. The single point automatic watering system, Hawker aquamatic, can be considered. Valve regulated batteries with absorbed electrolyte (AGM) or gel electrolyte are sealed for life and need no watering.

Installation

Battery monoblocs should be installed in accordance with the instructions from vehicles/trucks manufacturers (respect of polarity for the connection, and mechanically robust installation). While operating on battery connections avoid short circuits.

Storage

If batteries have to be stored out of service for a long time, they must be kept fully charged in a dry, clean and

frost free zone. A monthly refreshing charge avoids any harmful deep discharge and damage to the battery.

Maintenance

Keep batteries clean and dry to avoid current leakage. Clean the monoblocs with a damp cotton rag. Never use any organic solution!

Operation and maintenance instructions for each product range should always be observed.

Variants of polarity

Polarity	0	1	2
6 V			
12 V			



Hawker powerbloc

Hawker TP

Type	Voltage (V)	C ₅ (Ah)	C ₂₀ (Ah)	Dimensions (max. mm)			Weight (kg)	No of cycles*	Polarity	Terminals**
				L	W	H				
6 TP 200(1)	6	200	250	244	190	275	34.2	1000-1100	0	A
6 TP 175(1)	6	175	220	263	182	271	34	1000-1100	0	A
12 TP 80(1)	12	80	100	346	172	236	30	1000-1100	0	A
12 TP 100(1)	12	100	125	344	172	286	39	1000-1100	0	A
12 TP 116(1)	12	116	145	509	175	230	43	1000-1100	2	A

Hawker FP

Type	Voltage (V)	C ₅ (Ah)	C ₂₀ (Ah)	Dimensions (max. mm)			Weight (kg)	No of cycles*	Polarity	Terminals**
				L	W	H				
12 FP 30	12	30	39	217	135	223	12	400-600	0	A
12 FP 55	12	55	72	275	175	205	22	400-600	0	A
12 FP 80(1)	12	80	105	349	175	235	29.5	400-600	0	A
12 FP 100(1)	12	100	130	350	175	290	37	400-600	1	A
6 FP 190(1)	6	190	240	245	190	275	32	400-600	0	A

Hawker powerbloc dry

Hawker XP

Type	Voltage (V)	C ₅ (Ah)	C ₂₀ (Ah)	Dimensions (max. mm)			Weight (kg)	No of cycles*	Polarity	Terminals**
				L	W	H				
12 XP 51	12	51	57	271	164	220	22.1	800-1000	0	C-M6
12 XP 73	12	73	81	360	164	227	30.6	800-1000	0	C-M6
6 XP 180	6	180	200	246	192	276	37	800-1000	0	C-M8

Hawker MFP

Type	Voltage (V)	C ₅ (Ah)	C ₂₀ (Ah)	Dimensions (max. mm)					Weight (kg)	No of cycles*	Polarity	Terminals**
				L1*	L2*	W1*	W2*	H				
12 MFP 27	12	27	30	195	195	132	132.6	178	10.6	400-500	1	B
12 MFP 44	12	44	50	229	250	139	139.2	228	17.7	400-500	1	A
12 MFP 63	12	63	71	260	281.7	169	169.2	228	24.1	400-500	1	A
12 MFP 77	12	77	87	307	331	169	169.2	228	27.7	400-500	1	A
12 MFP 100	12	100	125	345		174	283		40	400-500	0	A
6 MFP 160	6	160	200	244	190	275			31	400-500	0	A

Hawker XFC

Type	Voltage (V)	C ₅ (Ah)	C ₂₀ (Ah)	Dimensions (max. mm)			Weight (kg)	No of cycles*	Polarity	Terminals**
				L	W	H				
12 XFC 37	12	37	40	196	165	170	17.4	400-500	0	C-M6
12 XFC 60	12	60	66	329	166	174	28.8	400-500	0	C-M6

L1* = length without handles, L2* = length with handles, W1* = width without handles, W2* = width with handles. Always supplied with handles.

* 80% depth of discharge max. ** type of terminals: A = Tapered (conical) terminal, B = bolt-through terminal, C = Terminal with insert

- **Cell construction**

The Hawker TP consists of robust tubular plate with free electrolyte to ensure a long operating life.

- **Hawker aquamatic (1)**

On request monoblocs can be equipped with an automatic watering system, Hawker aquamatic.

- **Cell construction**

The Hawker FP consists of reinforced flat grid plates with free electrolyte and is especially designed for use as a motive power battery.

- **Connection**

This range is equipped with lug type terminals or tapered terminals.

- **Cell construction**

This range consists of flat grid plates in special alloy with high mechanical resistance. The electrolyte is absorbed in a microporous separator (AGM) and the battery has a very high aptitude for high current, a reduced self-discharge and is resilient to temperature variations.

- **Totally maintenance free**

For applications in medium cycling duty and decentralised installation, no requirement for skilled personnel for maintenance and operation.

- **Cell construction**

The Hawker MFP consists of grid plates in special alloy with gel electrolyte. The battery has a very high aptitude for high current, a reduced self-discharge and is resilient to temperature variations. **Totally maintenance free due to electrolyte immobilized in a gel.** For applications in medium cycling duty.

- **Cell construction**

The Hawker XFC consists of very thin grid plates in special alloy. The electrolyte is absorbed in a microporous separator (AGM). The battery is capable of accepting a very high current allowing a rapid recharge in 2 hours. Reduced self-discharge and resilient to temperature variations. **Totally maintenance free.** For applications in medium cycling duty, rapid recharge and "on demand" availability.



Wherever in Europe you do business, Hawker can support you with motive power energy. The Hawker branded battery range, matched chargers and systems provide trouble free performance under the most demanding service conditions. Our strategically located manufacturing plants are efficient and responsive with a culture of continuous improvement and added value for our business partners.

Hawker has an enviable position in technology leadership and with significant investment in research and development we intend to stay at the leading edge in product innovation. Hawker evolution batteries and Hawker HF chargers, Lifeplus/Powertech have set new standards in maintenance free solutions. Our team of development engineers is driven by the desire to build the best energy solutions and works closely with our customers and suppliers to identify development opportunities. Our bias for rapid innovation means we get new products to market fast.

Hawker's integrated sales and service network across Europe is dedicated to providing our customers with the best solutions and after-sales support for their business. Whether you require 1 battery or a complete fleet of batteries, chargers, a battery handling system and a state of the art fleet management system, you can count on us. As part of EnerSys the world's largest industrial battery manufacturer, we are dedicated to being the best.



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