



Battery Range Summary

Features & Benefits

- **Wide Ah range of 2V cells and 12V monoblocs**
- **Excellent cyclic performance**
- **Exceptional fast charge acceptance ability**
- **Deep discharge recovery**
- **Resilient to harsh environments**
- **TPPL Technology – high energy density**
- **Up to 2-year shelf life**
- **Low total cost of ownership**

The EnerSys® PowerSafe® SBS® XC range of valve regulated lead acid cells and monoblocs is designed to meet the challenging demands of unreliable grid and renewable energy applications.

PowerSafe SBS XC benefits from EnerSys' state-of-the-art Thin Plate Pure Lead (TPPL) technology platform. The fast recharge and high reliability of PowerSafe SBS XC make it the perfect solution for challenging operating conditions in a network of poor grid stability where there is high risk of uncontrolled partial state of charge (PSoC) operation. It also has the benefit of resilience against deep discharge.

The high cyclability of PowerSafe SBS XC and its ability to operate in uncontrolled PSoC conditions, where ambient temperature can often be high, provides the operator significant benefits in terms of total cost of ownership (TCO).

Construction

- Thin Plate Pure Lead (TPPL) grid technology for long cycle life and efficient recharging
- Negative plates provide a balance with the positive plates to ensure optimum recombination efficiency
- Low resistance microporous glass fibre mat separator with high absorption and stability
- Containers and lids in UL94 V-0 rated flame retardant PC/ABS material, highly resistant to shock and vibration.
- High grade dilute sulphuric acid fully absorbed into the separator to prevent spillage in case of accidental damage
- Dual-seal terminal design to prevent leakage over the product life
- Self-regulating pressure relief valves prevent the ingress of atmospheric oxygen
- Flame arrestors built into each bloc/cell for operational safety

Installation & Operation

- Designed for operation in unreliable grid applications
- Suitable for applications in conjunction with renewable energy sources
- Monoblocs and cells can be installed in cabinets or on stands close to the point of use. A separate battery room is not necessary
- Products can be mounted in any orientation except inverted. In unreliable grid and renewable energy applications, EnerSys recommend to install SBS XC 320-900 cells in horizontally orientation
- Recommended float charge voltage: 2.29Vpc at 20°C (2.27Vpc at 25°C)
- Wide operating temperature range: -40°C to +50°C
- Up to 24 months shelf life at 20°C
- Low maintenance: no water addition required

Standards

- Designed to be compliant with the requirements of international standards IEC 60896-21/22 and IEC 61427-1
- UL recognised component
- Batteries must be installed in accordance with the IEC 62485-2 standard and national regulations
- Classified as non-spillable and approved as non-hazardous cargo for ground, sea and air transportation in accordance with the requirements of IMDG (International Maritime code for Dangerous Goods) and ICAO (International Civil Aviation Organisation)
- The management systems governing the manufacture of PowerSafe SBS XC products are ISO 9001, ISO 14001 and OHSAS 18001 certified

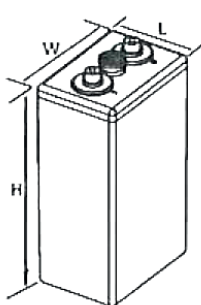
General Specifications

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)		Nominal Dimensions (mm)			Typical Weight (Kg)	Short Circuit Current (A) ⁽¹⁾	Internal Resistance (mΩ) ⁽¹⁾	Terminals
		C ₁₀ /1.80Vpc @ 20°C	C ₁₀ /1.75Vpc @ 25°C	Length mm	Width mm	Overall Height mm				
SBS XC 92F ⁽²⁾⁽⁴⁾	12	92	91	395	105	264	28.0	2300	5.5	2 x M8 F
SBS XC 92F-FT ⁽²⁾⁽⁴⁾	12	92	91	417	105	256	28.0	2300	5.5	2 x M6 M
SBS XC 190F-FT ⁽²⁾⁽⁵⁾	12	190	190	561	125	316	60.0	3990	3.3	2 x M6 M
SBS XC 320 ⁽³⁾	2	320	320	103	206	403	20.0	6320	0.33	2 x M10 F
SBS XC 400 ⁽³⁾	2	400	400	124	206	403	24.0	7320	0.28	2 x M10 F
SBS XC 580 ⁽³⁾	2	580	580	124	206	520	33.0	7470	0.28	2 x M10 F
SBS XC 680 ⁽³⁾	2	680	680	145	206	520	38.5	8800	0.24	2 x M10 F
SBS XC 780 ⁽³⁾	2	780	780	166	206	520	44.0	9000	0.23	2 x M10 F
SBS XC 900 ⁽³⁾	2	900	900	145	206	695	50.0	8110	0.26	2 x M10 F

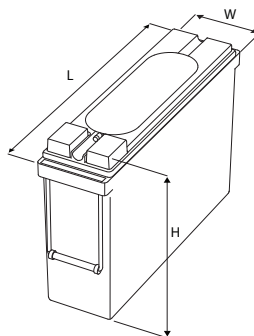
Notes:

- (1) Figures obtained via IEC method.
- (2) With integral or rope handles.
- (3) In horizontal orientation, the above indicated heights become the lengths, lengths become widths and widths become heights
- (4) Manifold built-in as standard.
- (5) Manifold available as an option (increases product height by 12mm).

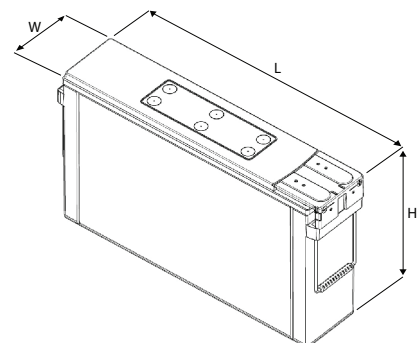
Outline Drawings



SBS XC 320 - 900



SBS XC 92F



SBS XC 92F-FT - SBS XC 190F-FT



EnerSys World Headquarters
2366 Bernville Road, Reading,
PA 19605, USA
Tel: +1-610-208-1991 /
+1-800-538-3627

EnerSys EMEA
EH Europe GmbH,
Baarerstrasse 18,
6300 Zug
Switzerland

EnerSys Asia
152 Beach Road,
Gateway East Building #11-08,
Singapore 189721
Tel: +65 6508 1780

Contact: