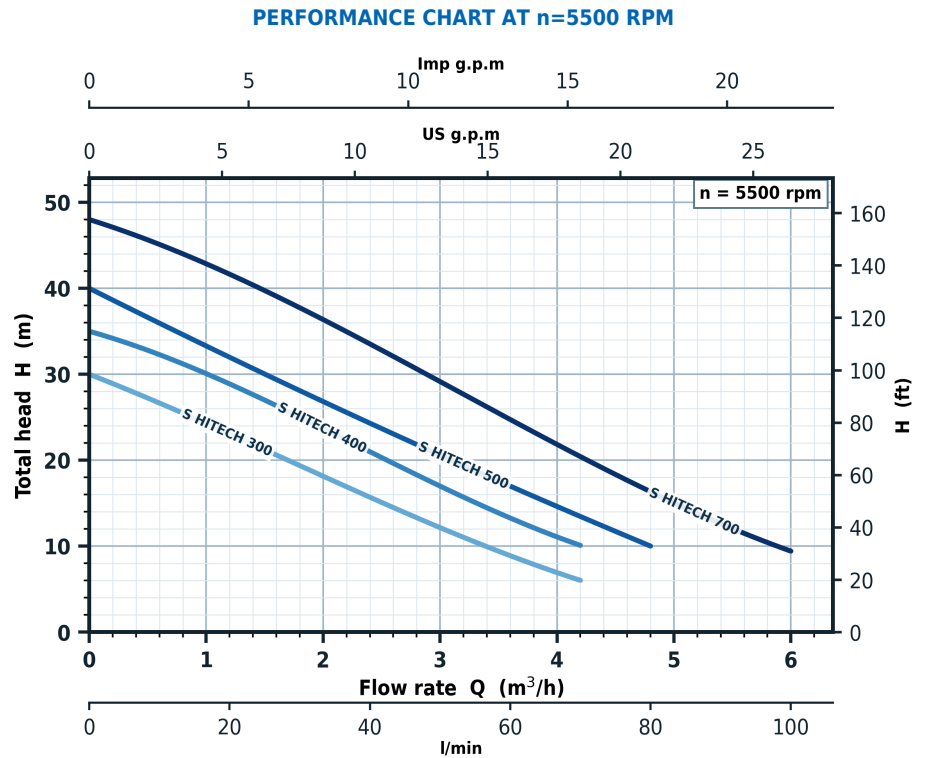


SATTE S HITECH DC Booster Pump



Curves show the published flow range for each model. Clean water at 20 C, tolerances to ISO 9906 Annex A.

Typical Applications

- Domestic shower and tap pressure boosting where mains pressure is inadequate.
- Solar water heater circulation and boosting.
- Point-of-use boosting for washing machines, dishwashers and instant heaters.
- Small booster sets where quiet, variable-speed operation is required.
- Applications where a DC brushless motor offers reduced energy consumption.

Operating Conditions

- Clean water, non-flammable and non-explosive, free of solid particles and fibres.
- Liquid temperature to +60 C; maximum ambient temperature +40 C.
- DC brushless motor with integrated electronic controller.
- Non-self-priming: the pump must be fully primed before starting.
- Automatic start on flow demand where a flow switch is fitted.
- Dry-running protection is provided by the integrated controller.
- Confirm supply voltage and controller specification before order.

Materials of Construction

- **Pump body:** Stainless steel AISI 304
- **Impeller:** Stainless steel AISI 304
- **Mechanical seal:** Ceramic / graphite
- **Motor housing:** Aluminium alloy
- **Shaft:** Stainless steel AISI 431
- **Motor:** DC brushless

SATTE S HITECH Technical Data

Technical Data

Motor			Voltage	Current (A)		m	m ³ /h		Inch	kg	mm
Model	kW	HP	Supply	In	Ist	Max H	Max Q	rpm	DN	Weight	L x W x H
S HITECH 300	0.34	0.46	1~ 220-240 V	2.7	12	30.0	4	5500	1"x1"	7.8	395x276x340
S HITECH 400	0.45	0.6	1~ 220-240 V	3.6	16	35.0	4	5500	1"x1"	6.5	340x240x390
S HITECH 500	0.5	0.67	1~ 220-240 V	4.0	18	40.0	5	5500	1"x1"	7.5	405x285x340
S HITECH 700	0.65	0.9	1~ 220-240 V	5.2	24	48.0	6	5500	1"x1"	7.8	405x285x340

Head-flow data is the published performance of the series, tested on clean water at 20 C at 5500 rpm. Tolerances to ISO 9906 Annex A. Maximum head is the head at zero flow; maximum flow is the highest published flow for the model.

SUCTION CONDITIONS: this is a surface-mounted series operating on suction lift. The achievable lift falls as liquid temperature and site altitude increase. At approximately 1,200 m altitude, atmospheric pressure is about 12% below sea level, reducing achievable suction lift by roughly 1.2 m. Keep the suction line short, airtight and fully flooded.

Currents are calculated nominal values for a two-pole motor (single phase at 230 V, three phase at 400 V). In is the full-load running current and Ist the direct-on-line starting current. Confirm against the motor nameplate before sizing cable, starter or overload.

Select the duty point within the published flow range. Operating far to the right of the range overloads the motor; operating far to the left causes heat build-up in the pump.

Dimensions are pump overall length x width x height in millimetres, as published for the series. Net weight is for the pump with standard motor and cable. Currents shown are the published full-load values where available.

Performance Table

Total head H (m) against flow rate Q (m³/h) at 5500 rpm, on clean water at 20 C. Motor power P2 is the standard motor rating for each model.

Motor			Q (m ³ /h)											
Model	kW	HP	0	0.3	0.6	1.2	1.8	2.4	3	3.6	4.2	4.8	5.4	6
S HITECH 300	0.34	0.46	30.0	28.0	26.5	23.0	19.5	15.5	12.0	9.0	6.0			
S HITECH 400	0.45	0.6	35.0	34.0	32.5	29.0	25.0	21.0	17.0	13.5	10.0			
S HITECH 500	0.5	0.67	40.0	38.0	36.0	32.0	28.0	24.5	20.5	17.0	13.5	10.0		
S HITECH 700	0.65	0.9	48.0	47.5	47.0	43.0	38.0	33.5	29.0	25.0	21.0	17.0	13.0	9.0

Blank cells indicate flows outside the published range for that model.

Solids handling: Not suitable for solids-bearing liquids. Discharge connection: 1" x 1".

Dimensions



- L** overall length
- W** overall width
- H** overall height

Dimensioned outline for the series. Per-model overall dimensions are tabulated above. Certified drawings are available on request for final design.

SATTE S HITECH

Exploded View

Exploded View

Component breakdown for the series, for identification of parts when ordering spares. Item numbers correspond to the manufacturer parts list; quote the SATTE model and the item number when requesting spares.

