

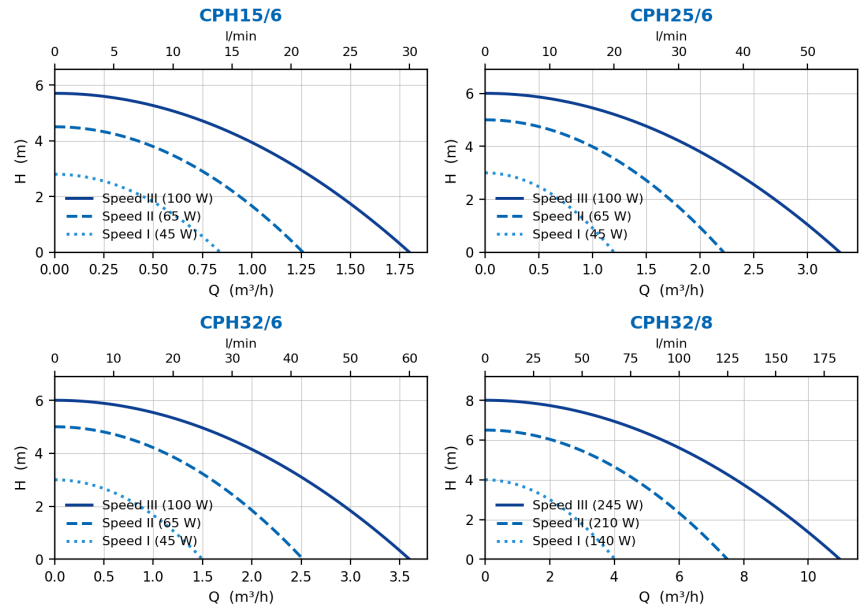
SATTE CPH

Circulator Pump



SATTE CPH

PERFORMANCE CHARTS - clean water, 20 C, 1~ 230 V 50 Hz



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

Typical Applications

- Domestic and light-commercial hydronic heating: radiator, underfloor and fan-coil circuits.
- Boiler, calorifier and solar thermal primary circuits.
- Hot-water recirculation to keep draw-off points primed.
- Air-conditioning and chilled-water secondary circulation.
- Water/glycol mixtures up to 1:1 for frost-protected systems.

Operating Conditions

- Suitable fluids: heating water (to VDI 2035), clean water, water/glycol mixtures to a maximum mixing ratio of 1:1. Not for solids-bearing, aggressive or explosive liquids.
- Liquid temperature range -10 C to +110 C; maximum ambient temperature +40 C.
- Maximum system working pressure 10 bar.
- Power supply 1~ 220-240 V, 50 Hz; enclosure class IP44, insulation class F.
- Three manually selectable speeds (I / II / III) via the terminal-box switch; the motor is non-overloading at every speed.
- Wet-rotor, glandless canned-motor design: the pumped liquid lubricates the ceramic bearings and cools the motor. Never run dry.
- Install with the pump shaft horizontal and the terminal box / control panel not facing downwards; maintain a minimum inlet pressure to prevent cavitation noise at high liquid temperatures.

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Materials of Construction

- **Pump body:** Cast iron
- **Impeller:** PP (polypropylene)
- **Shaft:** Ceramic
- **Bearings:** Ceramic
- **Rotor can / motor:** Stainless steel can, wet-rotor canned motor
- **Connection:** Threaded union (BSP)

Technical Data

		W	Voltage	Current (A)		l/min	m ³ /h	m	Inch	mm	mm
Model	Spd	P1 W	Supply	In	Ist	Max Q	Max Q	Max H	Connect.	Port to port	Packing LxWxH
CPH15/6	III	100	1~230 V	0.70	1.8	30	1.80	5.7	G1	130	310x280x288
	II	65	1~230 V	0.46	1.1	21	1.26	4.5	G1	130	310x280x288
	I	45	1~230 V	0.32	0.8	14	0.84	2.8	G1	130	310x280x288
CPH25/6	III	100	1~230 V	0.70	1.8	55	3.30	6.0	G1 1/2	180	404x280x300
	II	65	1~230 V	0.46	1.1	37	2.22	5.0	G1 1/2	180	404x280x300
	I	45	1~230 V	0.32	0.8	20	1.20	3.0	G1 1/2	180	404x280x300
CPH32/6	III	100	1~230 V	0.70	1.8	60	3.60	6.0	G2	180	404x280x300
	II	65	1~230 V	0.46	1.1	42	2.52	5.0	G2	180	404x280x300
	I	45	1~230 V	0.32	0.8	25	1.50	3.0	G2	180	404x280x300
CPH32/8	III	245	1~230 V	1.72	4.3	183	10.98	8.0	G2	180	420x305x202
	II	210	1~230 V	1.47	3.7	125	7.50	6.5	G2	180	420x305x202
	I	140	1~230 V	0.98	2.5	67	4.02	4.0	G2	180	420x305x202

Max. flow and max. head are the published values for each speed setting (III = high, II = medium, I = low): free-delivery flow and shut-off head. Tolerances to ISO 9906 Annex A.

Currents are calculated nominal values at 1~ 230 V: In is the full-load running current (P1 / 230 V x 0.62 power factor); Ist is the direct-on-line starting current, taken as 2.5 x In for a wet-rotor asynchronous motor. Confirm against the motor nameplate before sizing cable, fuse and protection. Port-to-port lengths are the industry-standard 130 mm (DN15) and 180 mm (DN25 / DN32); confirm the required length when ordering.

Select the duty point within the published range: operating at free delivery (far right) gives no useful head and operating near shut-off causes heat build-up in the pump.

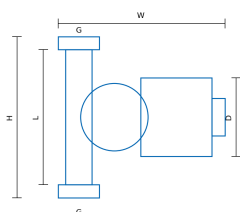
Performance Table

Total head H (m) against flow rate Q (m³/h), clean water at 20 C, tolerances to ISO 9906 Annex A.

		Power	Q (m3/h)												
Model	Spd	W	0	0.3	0.6	0.9	1.2	1.5	2.0	2.5	3.0	4.0	6.0	8.0	10.0
CPH15/6	III	100	5.7	5.5	5.1	4.3	3.2	1.7							
	II	65	4.5	4.2	3.5	2.2	0.4								
	I	45	2.8	2.4	1.4										
CPH25/6	III	100	6.0	6.0	5.8	5.6	5.2	4.8	3.8	2.6	1.0				
	II	65	5.0	4.9	4.6	4.2	3.5	2.7	0.9						
	I	45	3.0	2.8	2.2	1.3	0.0								
CPH32/6	III	100	6.0	6.0	5.8	5.6	5.3	5.0	4.1	3.1	1.8				
	II	65	5.0	4.9	4.7	4.4	3.9	3.2	1.9	0.1					
	I	45	3.0	2.9	2.5	1.9	1.1	0.0							
CPH32/8	III	245	8.0	8.0	8.0	7.9	7.9	7.9	7.7	7.6	7.4	6.9	5.6	3.8	1.4
	II	210	6.5	6.5	6.5	6.4	6.3	6.2	6.0	5.8	5.5	4.7	2.3		
	I	140	4.0	4.0	3.9	3.8	3.6	3.4	3.0	2.5	1.8	0.0			

Blank cells indicate flows beyond the free-delivery flow of that model / speed. Not suitable for solids-bearing liquids.

Dimensions



Model	L port-port	H over unions	W to motor end	D motor dia.	G union
CPH15/6	130	140	105	95	G1
CPH25/6	180	150	110	100	G1 1/2
CPH32/6	180	150	110	100	G2
CPH32/8	180	165	130	118	G2

Dimensions in mm; two values = 130 mm / 180 mm body. H, W and D are nominal for this size class of wet-rotor circulator; certified dimension drawings are available on request.