FLUGO

Technical Catalogue

FTW Series

Special Pump
For Cooling Tower

Pump introduction

FTW type pump is a non-self-priming, horizontal single-stage centrifugal pump with axial water inlet, radial water outlet.

- The pump is directly connected to the motor, which is small in size and easy to maintain.
- The pump body and impeller adopt an efficient hydraulic model, which has high efficiency and low noise.
- The castings adopt the lost foam casting process, with uniform wall thickness and smooth surface.
- The impeller adopts stainless steel precision casting technology, the shape line is accurate, and the appearance is smooth and beautiful.

Pump operating conditions

Thin, clean, non-flammable and explosive liquid that does not contain particles or fibers.

- Ambient temperature: no more than +40°C.
- Altitude: no more than 1000m.
- Maximum working pressure: 6bar.

Pump liquid temperature

- Liquid temperature -15°C to +70°C.

Performance curve

- All curves of 50Hz are based on 3×380V, and the motor is at a constant speed of 2900rpm, the measured value of 1450rpm.
- The test uses 20°C air-free water with a kinematic viscosity of 1mm2/S.
- The use of the pump refers to the performance range of the thick line to prevent the flow rate from being too small. Overheating, or excessive flow, motor overload and other problems.

Motor

FTW motor is a fully enclosed, air-cooled customized shaft extension motor, which can be applied for continuous work system operation.

- Protection class: IP55
- Insulation grade: F
- Standard voltage: 50Hz 1x220V 3x380V

Installation conditions

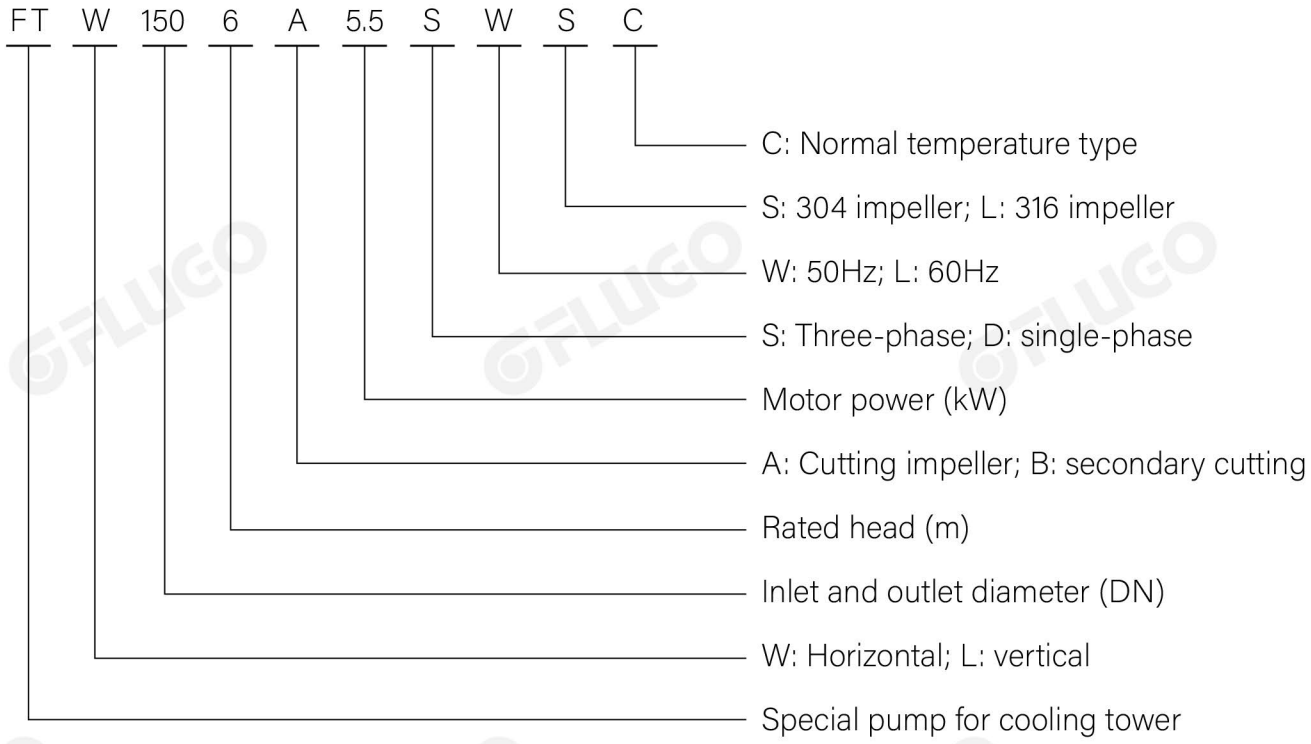
The FTW cooling tower pump is a direct connection and consists of a pump and a motor with a customized shaft extension:

- The pump should be installed in a ventilated and freeze-proof place.
- It should be ensured that the stress of the pipe-line will not affect the use of the pump.
- If the pump is installed outdoors, a suitable shield must be installed to prevent electricity, the components of the device are damaged by moisture.
- The electrical wiring device should ensure that the pump is not affected by phase loss, voltage instability, and overload, and damage caused by leakage and other conditions.
- In order to facilitate maintenance, sufficient space needs to be reserved around the unit.
- The pump should be installed horizontally on the base, and the horizontal direction is the suction port of the pump, the vertical direction is the discharge port of the pump.
- Flange pressure rating: PN6.

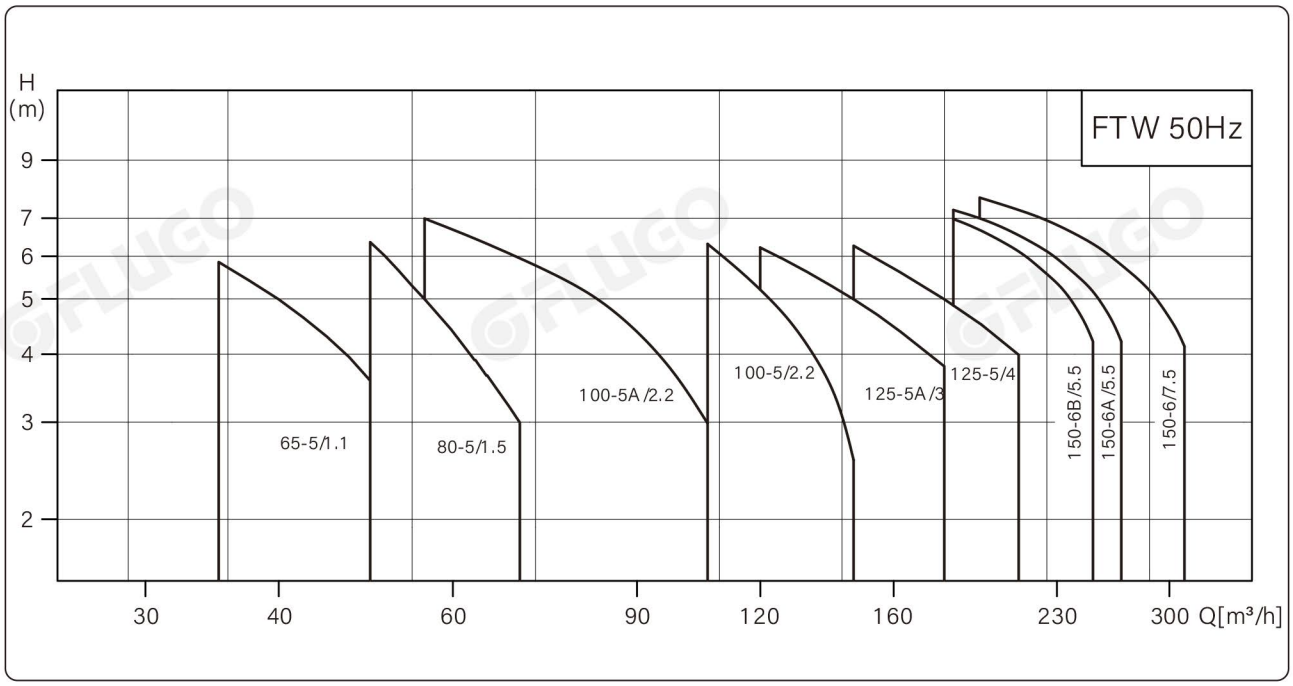
Typical applications

- Water circulation of closed cooling towers and condensers.
- Cooling of various unit equipment.
- Other occasions where large-flow and low-head circulating water supply is used.

Model deifinition



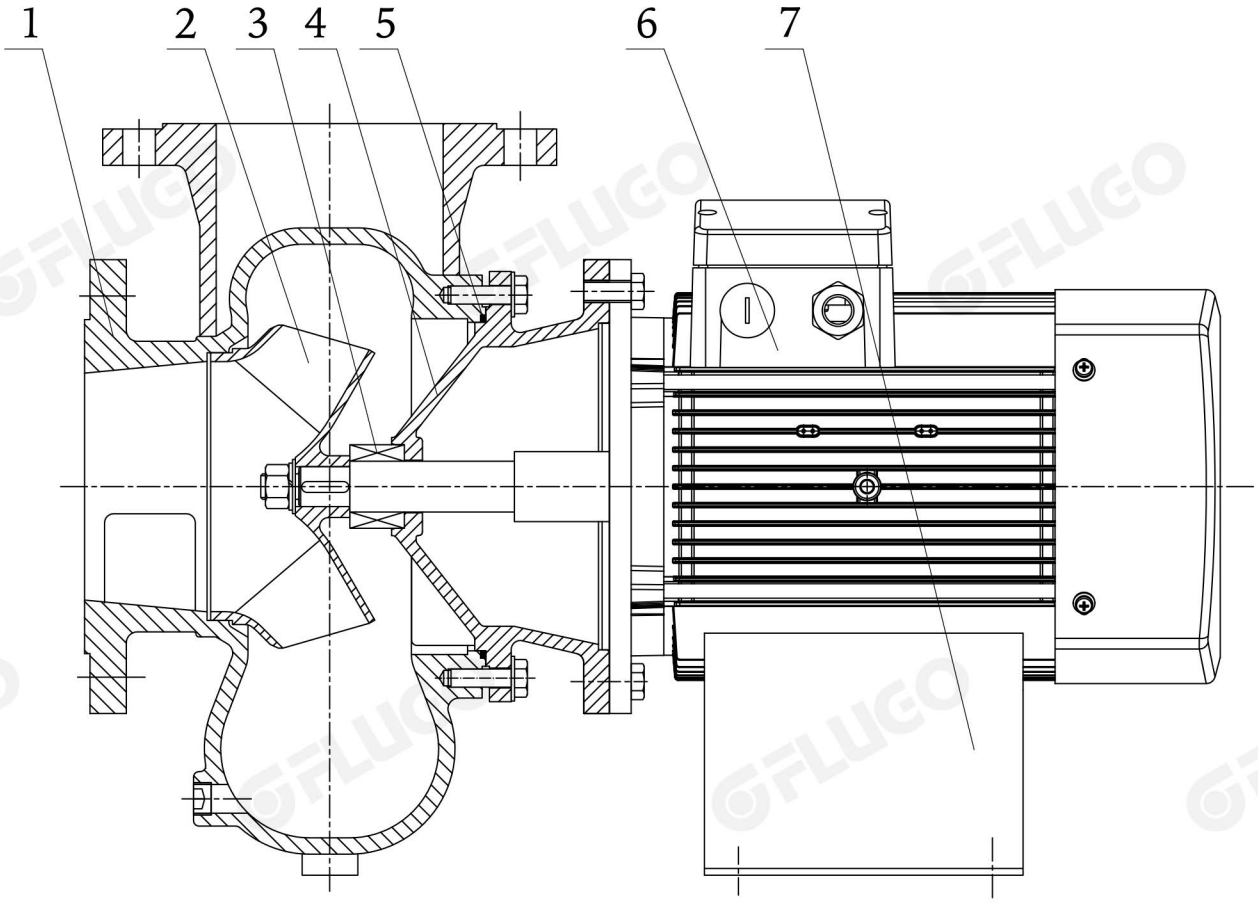
Performance range



FTW performance parameters (50Hz)

		(m³/h)	(m)	(kW)	(rpm)
1	FTW65-5/1.1	45	5	1.1	2900
2	FTW80-5/1.5	55	5	1.5	2900
3	FTW100-5A/2.2	100	5	2.2	1450
4	FTW100-5/2.2	120	5	2.2	1450
5	FTW125-5A/3	150	5	3	1450
6	FTW125-5/4	180	5	4	1450
7	FTW150-6B/5.5	220	6	5.5	1450
8	FTW150-6A/5.5	240	6	5.5	1450
9	FTW150-6/7.5	260	6	7.5	1450

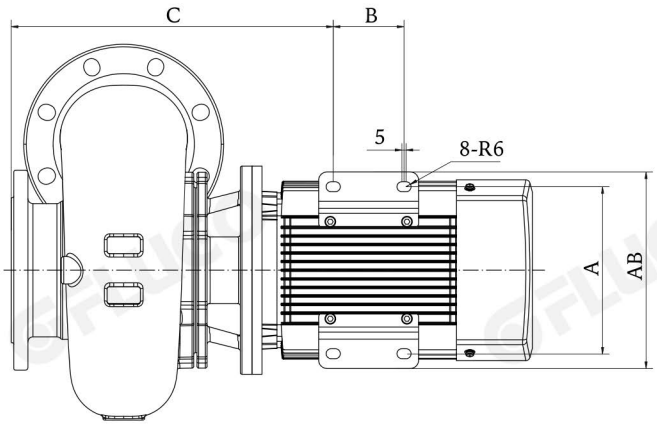
Schematic diagram of surface structure

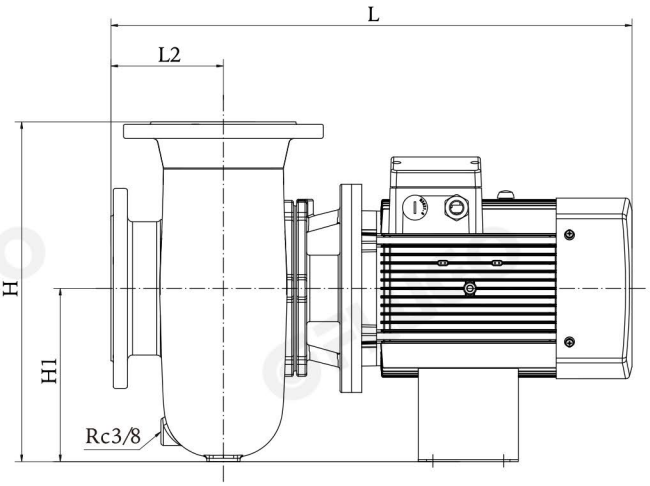


Material table of main parts

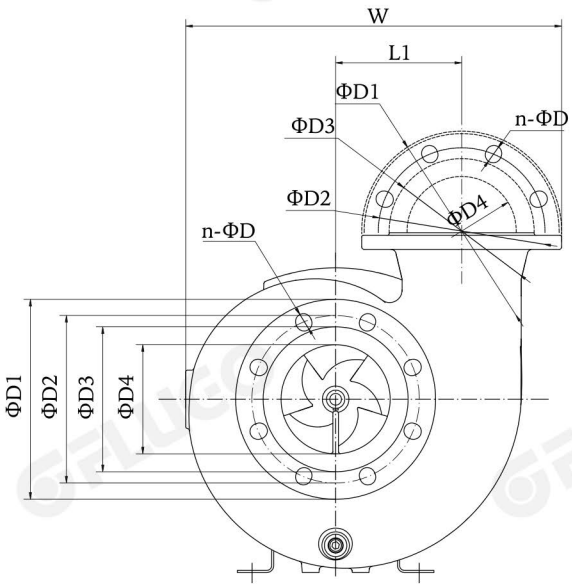
No	Parts	Material	GB	EN DIN	AISI/ASTM
1	Pump Body	Cast Iron	GB/T9439-HT200	EN1561 EN-GJL-200	ASTM25B
2	Impeller	Stainless Steel	GB/T2100-ZG07Cr19Ni9	EN10088 1.4301	AISI304
3	Mechanical Seal	/	/	/	/
4	Pump Head	Cast Iron	GB/T9439-HT200	EN1561 EN-GJL-200	ASTM25B
5	O-Ring	NBR	/	/	/
6	Motor	/	/	/	/
7	Base	Carbon Steel	GBT700-Q235B	EN10025 S235JR	ASTM A283

Installation size and product weight



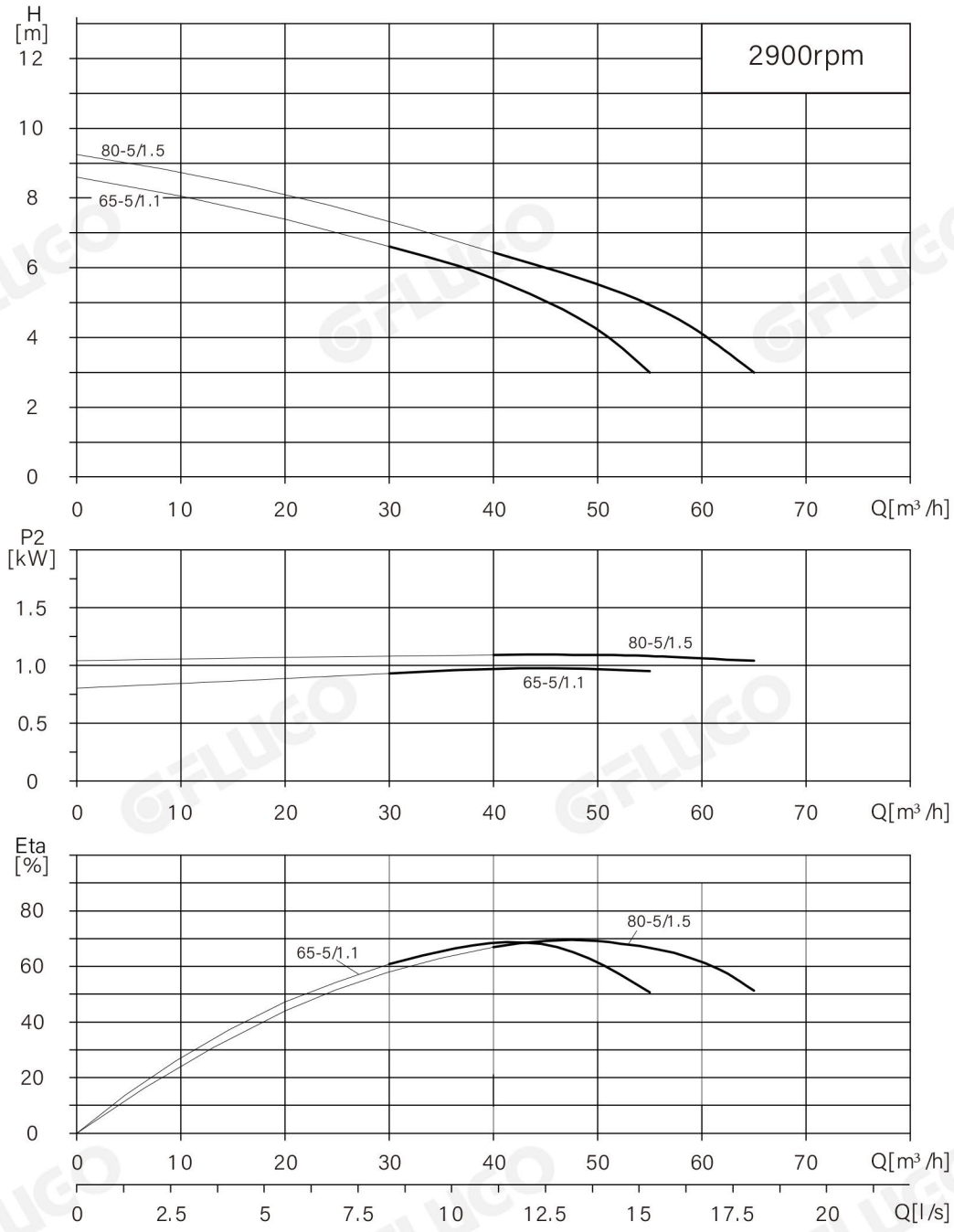


The flange complies with the size requirements of PN6 in GB/T17241.6



Pump Model	Size (mm)															Weight (Kg)
	L	H	H1	W	A	B	C	AB	D1	D2	D3	D4	n-ΦD	L1	L2	
FTW65-5/1.1	475	238	118	272	160	65	296.5	195	160	130	94	65	4-Φ14	85	100	28
FTW80-5/1.5	494	260	120	290	175	85	297	210	190	150	110	80	4-Φ19	85	110	34
FTW100-5A/2.2	605	335	165	368	185	85	370.5	220	210	170	130	100	4-Φ19	120	130	56
FTW100-5/2.2	605	335	165	368	185	85	370.5	220	210	170	130	100	4-Φ19	120	130	56
FTW125-5A/3	614	408	208	454	185	85	379.5	220	240	200	160	125	8-Φ19	150	135	70
FTW125-5/4	626	408	208	454	200	85	386.5	236	240	200	160	125	8-Φ19	150	135	77
FTW150-6A(B)/5.5	693	432	232	507	240	140	401	280	265	225	182	150	8-Φ19	175	145	114
FTW150-6/7.5	731	432	232	507	240	140	420	280	265	225	182	150	8-Φ19	175	145	119

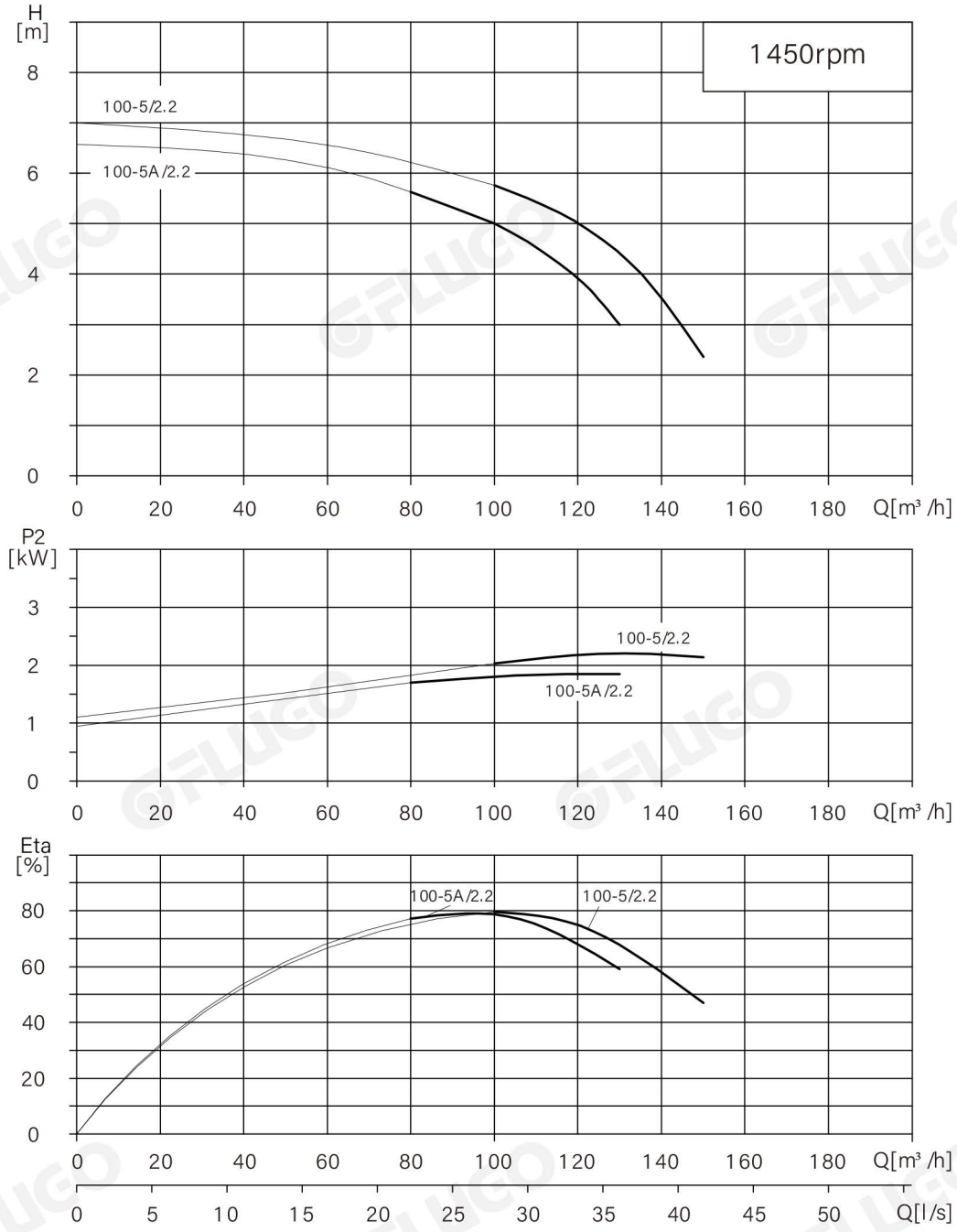
FTW65/80 Operating performance curve



Operational performance data

Pump model	Equipped with motor power		Q [m³/h]	30	35	40	45	50	55	60	65	70
	(kW)	(HP)										
FTW65-5/1.1	1.1	1.5	H (m)	6.6	6	5.7	5	4.2	3.1			
FTW80-5/1.5	1.5	2				6.4	6.1	5.6	5	3.9	3	

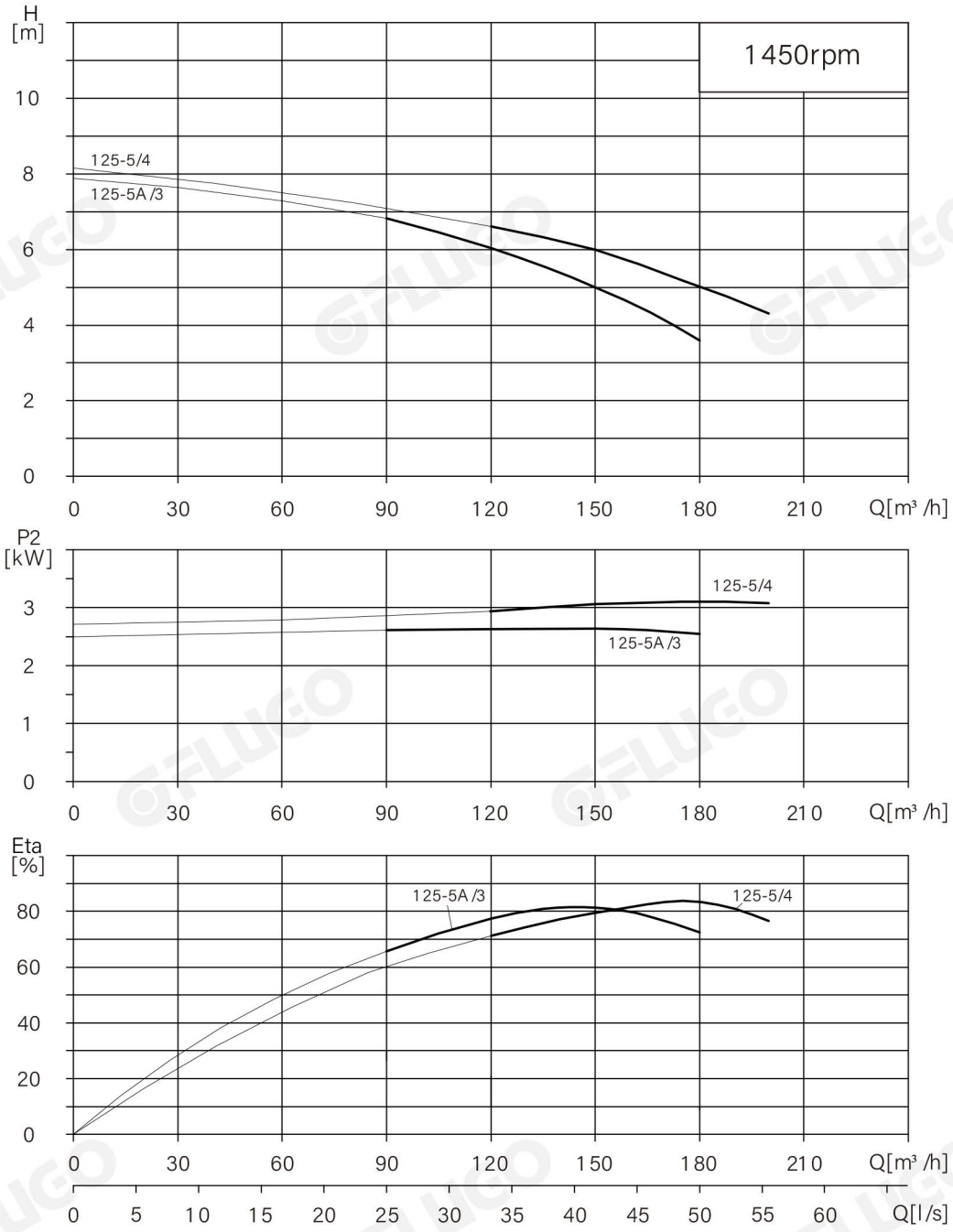
FTW100 Operating performance curve



Operational performance data

Pump model	Equipped with motor power		Q [m³/h]	80	90	100	110	120	130	140	150
	(kW)	(HP)									
FTW100-5A/2.2	2.2	3	H (m)	5.9	5.6	5	4.4	3.8	3		
FTW100-5/2.2	2.2	3				6	5.6	5	4.2	3.5	2.3

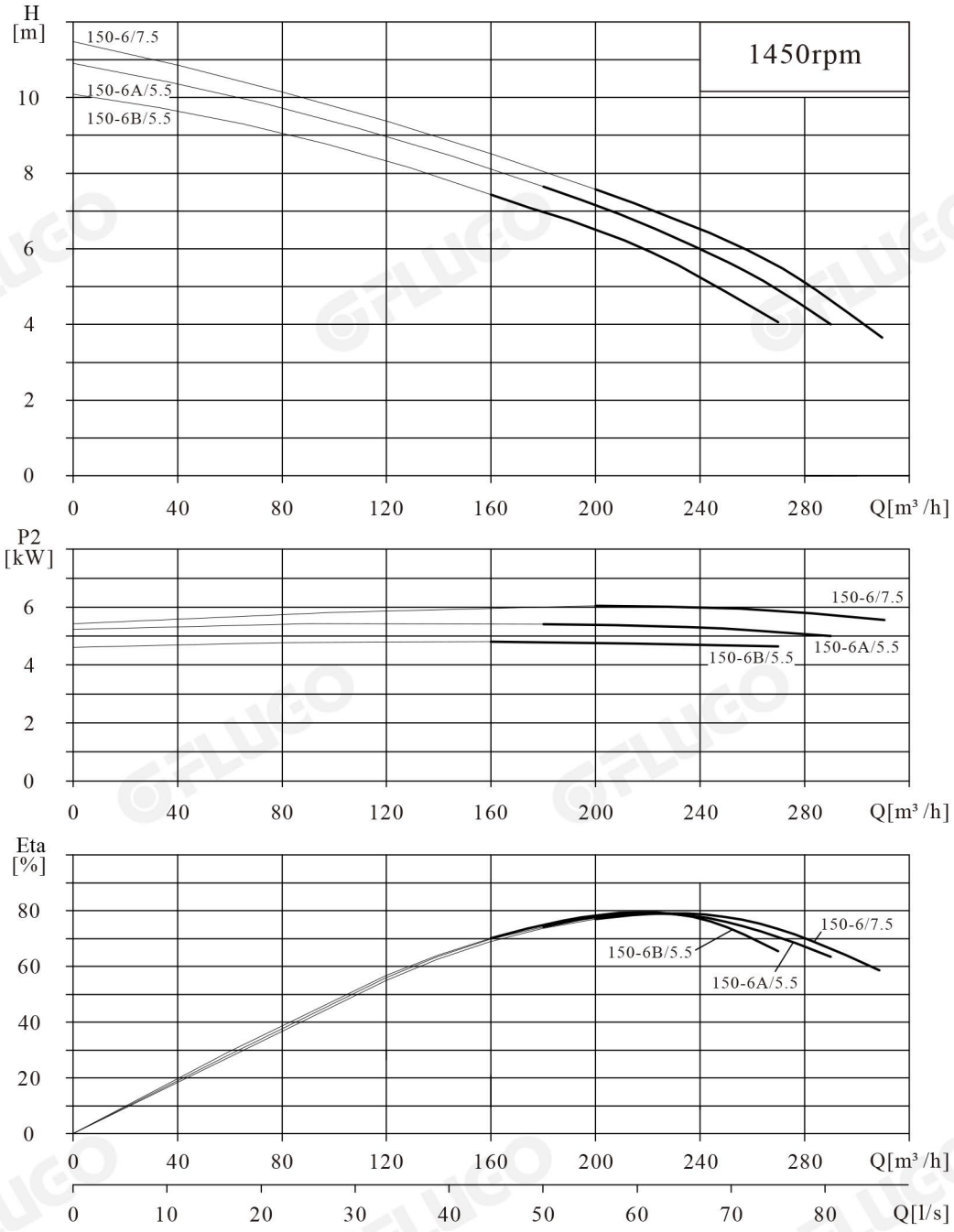
FTW125 Operating performance curve



Operational performance data

Pump model	Equipped with motor power		Q[m³/h]	90	120	140	150	160	170	180	190	200
	(kW)	(HP)										
FTW125-5A/3	3	4	H (m)	6.9	6	5.4	5	4.6	4.3	3.6		
FTW125-5/4	4	5.5			6.5	6.2	6	5.8	5.6	5	4.6	4.3

FTW150 Operating performance curve



Operational performance data

Pump model	Equipped with motor power		Q[m³/h]	160	180	200	220	240	260	270	290	312
	(kW)	(HP)										
FTW150-6B/5.5	5.5	7.5	H (m)	7.4	6.8	6.4	6	5.2	4.4	4.1		
FTW150-6A/5.5	5.5	7.5			7.6	7.1	6.6	6	5.3	5	4	
FTW150-6/7.5	7.5	10				7.6	7	6.5	6	5.4		3.8

Authorized Distributor

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