



# SUBMERSIBLE PUMPS

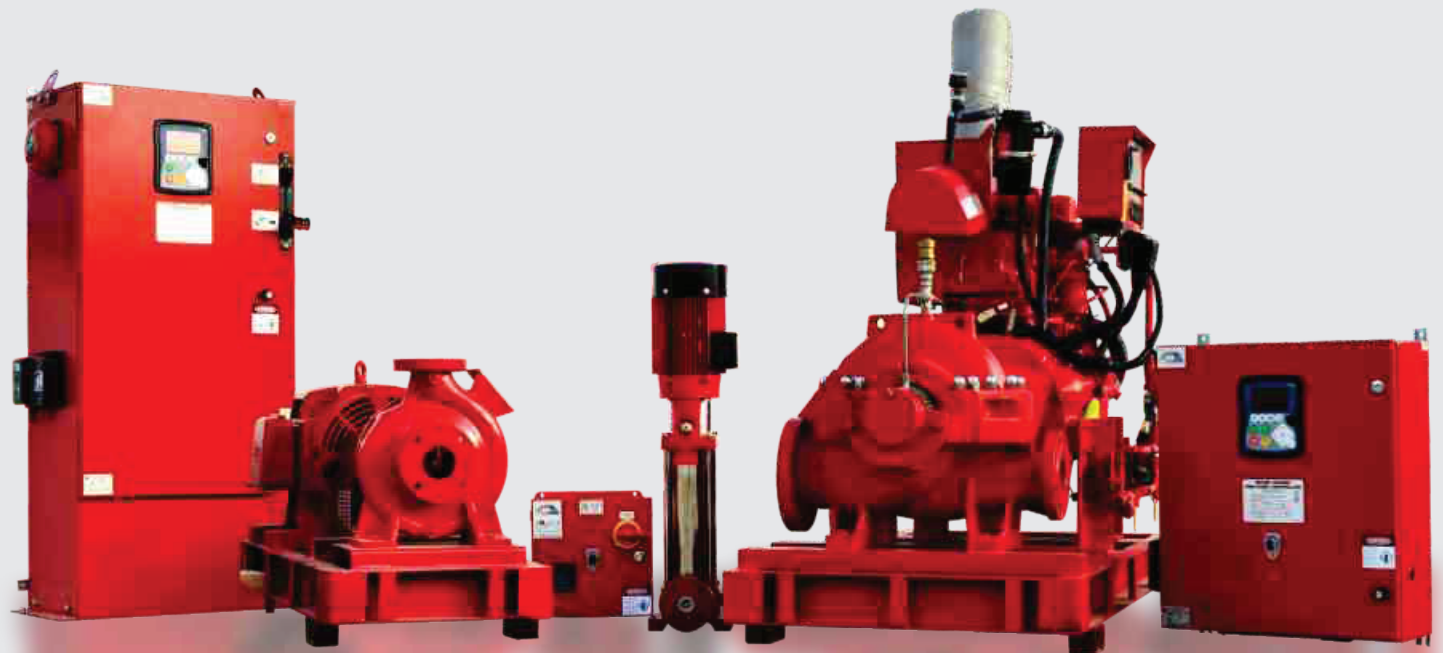


Starlone

**FIRE PUMP SINGAPORE PTE LTD**

No.8 Keng Chin Road  
#13-11 Cyan South Tower  
Singapore 258710

Phone +65 6515 5123  
Fax +65 6515 5272  
Saha +65 90998565





Shandong Facility

## ABOUT FIRE PUMP SINGAPORE (FPS)

FPS, with its 20 years of experience has always been a progressive organization that has remained in the forefront of the Fire Fighting Industry with innovative, unconventional, environmental friendly, re-engineered and unique products.

FPS in its state-of-the-art manufacturing plants in **China** works in close connections with renowned governmental and certification bodies to provide key answers to the challenges faced by the society.

FPS brings together over 2-Decades of expertise and experience in form of **Design, Consultancy, Manufacturing, Supply, Installation, Testing, Commissioning, Maintenance & Refurbishment** of fire protection and fire fighting systems.



# FPS CERTIFIED FACILITY FOR FIRE PUMP SYSTEMS

## TESTING FACILITY AND ASSEMBLY LINE

FPS has established a fully equipped AS2941 Pump Testing facility with advance testing and calibration devices that enable to accurately inspect and test the operation of each Centrifugal Stationery Fire Pump to the required level of compliance standard as per AS2941.

The Fire Pumps then undergo various processes in our modern well organized manufacturing and assembly line.

Before delivering to our customers, each pump undergoes necessary inspection, tests and production control, during the Assembly process, for which all records are maintained.

## PERFORMANCE TESTS

Performance curves are plotted within the FPS AS2941 **Approved Pump Testing Facility** showing the Efficiency, Break-Horsepower(kw), and Total Head developed at shutoff, at rated capacity, at 150%of rated capacity, and at selected intermediate capacities between shutoff and maximum capacities exceeding 150% of rated capacity.



# FPS CERTIFIED FACILITY FOR FIRE PUMP SYSTEMS

## HYDROSTATIC TEST

Each pump is to be tested hydro-statically for not less than 5 minutes. The test pressure is to be up to 2 times the maximum working pressure of the pump, but in no case less than 250psi (1724 kPa) to ensure no rupture or leakage through the castings at the test pressure.

## IMPELLER BALANCING

The impellers of each pump shall be dynamically balanced to the G6.3 balance quality grade in accordance with the requirements for pump impellers in the Standard for Mechanical Vibration -Balance Quality.





# SUBMERSIBLE PUMPS

## *DESIGN & OPERATION FEATURES*

Type FPQW submersible sewage pump is newly developed on the basis of the advanced technology from international. It is used for industry and commerce, the living area, urban sewage treatment plant, waterworks, civil air-defense construction, hospital, hotel and so on. They can also be used in public works, explore, country methane, irrigation, deliver water with impurity. The flow-rate range of the delivery water is 7-10000m<sup>3</sup>/h, lift range is 7-60m, power range is 0.55-315KW, caliber range is  $\varnothing 25$ - $\varnothing 700$  mm.



# SUBMERSIBLE PUMPS

## *DESIGN & OPERATION FEATURES*

1. Type FPQW Submersible Sewage Pump adopt particular single blade or double blade, advance the ability for get across feculence. Fibre about 5 times as pump caliber can across.
2. Mechanical seal adopt fresh model cemented carbide rot-proof material, and at the same time, we improved on the airproof to the single-ended double-face mechanical seal, let them work in oil chamber for a long period of time.
3. The whole structure is compact, volume is small, little noise and the energy saving result was apparent. The machine needn't pump room .It can work just dinning into water, so reduce project cost.
4. The seal oil-room has high precision and anti-interference water leakage, testing detector. The pre-cast thermo-sensitive element is in stator winding, it can protect motor.
5. According to need, we can equip safety protection control cupboard to protect the pump, advanced the safety and reliability.
6. The float switch can control automatically, do not need specially-assigned person. It's very convenient.
7. According to need, we can equip automatic coupler installation system. So people needn't get into the drainage ditch.
8. Can be used in all the range of lift and it won't overload.
9. There are two different install way, fixed type automatic installation system and movable type automatic installation system.



# SUBMERSIBLE PUMPS

## *NOMENCLATURE*

### 100FPQW100 - 15 - 7.5

---

100 - pump outlet diameter (100mm)

FP - made in Fire Pump Singapore Pte Ltd

QW - type submersible pump

100 - capacity 100m<sup>3</sup>/h

15 - head (15m)

7.5 - motor power (7.5 kW)



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
25FPQW8-22-1.1	Φ 25	8		22	2900	1.1	38	42
32FPQW12-12-1.1	Φ 32	12		15	2900	1.1	40	42
40FPQW15-15-1.5	Φ 40	15		15	2900	1.5	45	52
40FPQW15-30-1.5	Φ 40	15		30	2900	2.2	45	55
50FPQW20-7-0.75	Φ 50	20		7	2900	0.75	54	50
50FPQW20-10-0.75	Φ 50	10		10	2900	0.75	56	50





# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity	Head	Speed	Power	Eff.	Weight
		Q	H	n	N	η	
		m <sup>3</sup> /h	m	r/min	kW	%	
	mm						kg
50FPQW25-10-1.5	Φ 50	25	10	2900	1.5	56	60
50FPQW20-15-1.5	Φ 50	20	15	2900	1.5	55	55
50FPQW27-15-2.2	Φ 50	27	15	2900	2.2	56	60
50FPQW25-25-2.2	Φ 50	15	25	2900	2.2	56	60
50FPQW18-30-0.3	Φ 50	18	30	2900	3.0	58	70
50FPQW24-20-4.0	Φ 50	24	20	2900	4.0	60	85
50FPQW25-32-5.5	Φ 50	25	32	2900	5.5	53	100
50FPQW30-30-7.5	Φ 50	30	30	2900	7.5	56	110



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity	Head	Speed	Power	Eff.	Weight
		Q	H	n	N	$\eta$	
	mm	m <sup>3</sup> /h	m	r/min	kW	%	kg
50FPQW20-40-7.5	Φ 50	20	40	2900	7.5	55	110
65FPQW42-9-2.2	Φ 65	42	9	2900	2.2	56	60
65FPQW25-15-2.2	Φ 65	25	15	2900	2.2	52	60
65FPQW42-9-2.2	Φ 65	42	9	2900	2.2	56	60
65FPQW25-5-2.2	Φ 65	25	15	2900	2.2	52	60
65FPQW37-13-3.0	Φ 65	37	13	2900	3.0	55	70
65FPQW25-30-4.0	Φ 65	25	30	2900	3.0	58	85



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	$\eta$	
		m <sup>3</sup> /h		m	r/min	kW	%	
	mm							kg
65FPQW40-30-7.5	Φ 65	40		30	2900	7.5	58	110
65FPQW30-40-7.5	Φ 65	30		40	2900	7.5	56	110
65FPQW35-50-11	Φ 65	35		50	2900	11	60	200
65FPQW35-60-15	Φ 65	35		60	2900	15	63	230
80FPQW40-7-2.2	Φ 80	40		7	1450	2.2	52	75
80FPQW30-8-2.2	Φ 80	30		8	1450	2.2	40	75
80FPQW50-10-3	Φ 80	50		10	2900	3.0	58	85
80FPQW43-13-3	Φ 80	43		13	2900	3.0	50	85



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
80FPQW60-13-4	Φ 80	60		13	2900	4.0	65	90
80FPQW40-15-4	Φ 80	40		15	2900	4.0	57	90
80FPQW80-15-7.5	Φ 80	80		15	2900	7.5	71	135
80FPQW65-25-7.5	Φ 80	65		25	2900	7.5	56	135
100FPQW100-7-4	Φ 100	100		7	1450	4.0	72.5	130
100FPQW80-10-4	Φ 100	80		10	1450	4.0	62	130
100FPQW-110-10-5. 5	Φ 100	110		10	1450	5.5	66	155





# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q	H		n	N	η	
	mm	m <sup>3</sup> /h	m		r/min	kW	%	kg
100FPQW65-15-5.5	Φ 100	65	15		1450	5.5	59	150
100FPQW100-15-7.5	Φ 100	100	15		1450	7.5	67	170
100FPQW85-20-7.5	Φ 100	85	20		1450	7.5	68	170
100FPQW50-22-7.5	Φ 100	50	22		1450	7.5	63	170
100FPQW100-25-11	Φ 100	100	25		1450	11	66	270
100FPQW70-22-11	Φ 100	70	22		1450	11	59	270
100FPQW50-35-11	Φ 100	50	35		1450	11	67	270
100FPQW87-28-15	Φ 100	87	28		1450	15	68	300



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
	mm							kg
100FPQW100-30-15	Φ 100	100		30	1450	15	63	300
100FPQW100-35-18. 5	Φ 100	100		35	1450	18.5	65	300
125FPQW130-15-11	Φ 125	130		15	1450	11	62	320
125FPQW130-20-15	Φ 125	130		20	1450	15	63	330
150FPQW140-7-7.5	Φ 150	140		7	1450	5.5	72	180
150FPQW120-10-5.5	Φ 150	120		10	1450	5.5	70	180
150FPQW210-7-7.5	Φ 150	210		7	1450	7.5	75	190



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

Para Type	Outlet Dia mm	Capacity		Head	Speed	Power	Eff.	Weight kg
		Q	H		n	N	η	
		m <sup>3</sup> /h	m		r/min	kW	%	
150FPQW145-9-7.5	Φ 150	145	9		1450	7.5	63	190
150FPQW110-15-7.5	Φ 150	110	15		1450	7.5	72	190
150FPQW200-10-15	Φ 150	200	10		1450	15	64	300
150FPQW180-15-15	Φ 150	180	15		1450	15	65	300
150FPQW140-18-15	Φ 150	140	18		1450	15	65	300
150FPQW200-15-18. 5	Φ 150	200	14		1450	18.5	68	400
150FPQW180-20-18. 5	Φ 150	180	20		1450	18.5	68	400
150FPQW150-25-18. 5	Φ 150	150	25		1450	18.5	68	400



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity	Head	Speed	Power	Eff.	Weight
		Q	H	n	N	$\eta$	
	mm	m <sup>3</sup> /h	m	r/min	kW	%	kg
150FPQW200-22-2	Φ 150	200	22	1450	22	73	430
150FPQW180-25-22	Φ 150	180	25	1450	22	76	430
150FPQW130-30-22	Φ 150	130	30	1450	22	75	430
150FPQW250-22-30	Φ 150	250	22	1450	30	73	500
150FPQW180-30-30	Φ 150	10	30	1450	30	73	500
150FPQW200-30-37	Φ 150	200	30	1450	37	70	600
150FPQW150-35-37	Φ 150	200	35	1450	37	63	600





# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity	Head	Speed	Power	Eff.	Weight
		Q	H	n	N	$\eta$	
	mm	m <sup>3</sup> /h	m	r/min	kW	%	kg
150FPQW160-45-37	Φ 150	160	45	1450	37	65	600
200FPQW360-6-11	Φ 200	360	6	980	11	72	450
200FPQW300-70-11	Φ 200	300	7	980	11	73	450
200FPQW400-7-15	Φ 200	700	7	980	15	78	480
200FPQW250-11-15	Φ 200	250	11	980	15	74	480
200FPQW300-10-18. 5	Φ 200	300	10	1450	18.5	72	480
200FPQW250-15-18. 5	Φ 200	250	15	1450	18.5	72	480
200FPQW400-10-22	Φ 200	400	10	1450	22	76	500



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
	mm							kg
200FPQW310-13-22	Φ 200	310		13	1450	22	62	500
200FPQW300-15-22	Φ 200	300		15	1450	22	73	500
200FPQW400-13-30	Φ 200	400		13	1450	30	73	650
200FPQW360-15-30	Φ 200	360		15	1450	30	75	650
200FPQW250-22-30	Φ 200	250		22	1450	30	71	680
200FPQW350-25-37	Φ 200	350		25	1450	37	75	800
200FPQW400-25-45	Φ 200	400		25	1450	45	75	920



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
	mm							kg
200FPQW380-28-45	Φ 200	380		28	1450	45	70	920
200FPQW250-35-45	Φ 200	250		35	1450	45	69	920
200FPQW400-30-55	Φ 200	400		30	1450	55	70	1000
200FPQW250-40-55	Φ 200	250		40	1450	55	69	1000
200FPQW350-40-75	Φ 200	350		40	1450	75	68	1050
250FPQW600-9-30	Φ 250	600		9	980	30	74	850
250FPQW500-10-30	Φ 250	500		10	980	30	71	850
250FPQW700-10-37	Φ 250	700		10	1450	37	81	850



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q	H		n	N	η	
	mm	m <sup>3</sup> /h	m		r/min	kW	%	kg
250FPQW600-12-37	Φ 250	600	12		1450	37	78	850
250FPQW600-15-45	Φ 250	600	15		1450	45	75	950
250FPQW600-20-55	Φ 250	600	20		1450	55	73	1300
250FPQW700-20-75	Φ 250	700	20		1450	75	78	1500
250FPQW600-25-75	Φ 250	600	25		1450	75	73	1500
250FPQW600-30-90	Φ 250	600	30		1450	90	72	1600
300FPQW900-8-37	Φ 300	900	8		980	37	81	1380





# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
300FPQW800-12-45	Φ 300	800		12	980	45	76	1500
300FPQW500-15-45	Φ 300	500		15	980	45	70	1500
300FPQW800-15-55	Φ 300	800		15	980	55	73	1550
300FPQW600-20-55	Φ 300	600		20	980	55	75	1550
300FPQW800-20-75	Φ 300	800		20	980	75	78	1600
300FPQW950-20-90	Φ 300	950		20	980	90	80	1700
300FPQW1000-25-1 10	Φ 300	1000		25	1450	110	82	2000
300FPQW800-32-11 0	Φ 300	800		32	1450	110	76	2000



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

Para Type	Outlet Dia mm	Capacity	Head	Speed	Power	Eff.	Weight kg
		Q	H	n	N	$\eta$	
		m <sup>3</sup> /h	m	r/min	kW	%	
300FPQW800-36-13 <sub>2</sub>	Φ 300	800	36	1450	132	76	2000
350FPQW1200-8-45	Φ 350	1200	8	980	45	84	1350
350FPQW1100-10-5 <sub>5</sub>	Φ 350	1100	10	980	55	84	1380
350FPQW1300-12-7 <sub>5</sub>	Φ 350	1300	12	980	75	83	1450
350FPQW1500-15-9 <sub>0</sub>	Φ 350	1500	15	980	90	82	2000
350FPQW1200-18-9 <sub>0</sub>	Φ 350	1200	18	980	90	83	2000
350FPQW1100-28-1 <sub>30</sub>	Φ 350	1100	28	740	132	83	2520



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
mm								kg
350FPQW1100-36-1 60	Φ 350	1000		36	740	160	78.5	2880
400FPQW1760-7.5-5 5	Φ 400	1760		7.5	580	55	82.3	2000
400FPQW1300-10-5 5	Φ 400	1300		10	580	55	82	2000
400FPQW2600-6-75	Φ 400	2600		6	740	75	78	1750
400FPQW1500-10-7 5	Φ 400	1500		10	980	75	82.1	1750
400FPQW2200-9-11 0	Φ 400	2200		9	980	110	80	2100
400FPQW2000-15-1 32	Φ 400	2000		15	740	132	82.5	2520
400FPQW1600-20-1 32	Φ 400	1600		20	740	132	82	2520



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q	H	n	N	η		
	mm	m³/h	m	r/min	kW	%	kg	
300FPQW800-36-13 <sub>2</sub>	Φ 300	800	36	1450	132	76	2000	
350FPQW1200-8-45	Φ 350	1200	8	980	45	84	1350	
350FPQW1100-10-5 <sub>5</sub>	Φ 350	1100	10	980	55	84	1380	
350FPQW1300-12-7 <sub>5</sub>	Φ 350	1300	12	980	75	83	1450	
350FPQW1500-15-9 <sub>0</sub>	Φ 350	1500	15	980	90	82	2000	
350FPQW1200-18-9 <sub>0</sub>	Φ 350	1200	18	980	90	83	2000	
350FPQW1100-28-1 <sub>30</sub>	Φ 350	1100	28	740	132	83	2520	



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
350FPQW1100-36-1 60	Φ 350	1000		36	740	160	78.5	2880
400FPQW1760-7.5-5 5	Φ 400	1760		7.5	580	55	82.3	2000
400FPQW1300-10-5 5	Φ 400	1300		10	580	55	82	2000
400FPQW2600-6-75	Φ 400	2600		6	740	75	78	1750
400FPQW1500-10-7 5	Φ 400	1500		10	980	75	82.1	1750
400FPQW2200-9-11 0	Φ 400	2200		9	980	110	80	2100
400FPQW2000-15-1 32	Φ 400	2000		15	740	132	82.5	2520
400FPQW1600-20-1 32	Φ 400	1600		20	740	132	82	2520



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div> <div>Para</div> <div>Type</div> </div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q	H		n	N	$\eta$	
		m <sup>3</sup> /h	m		r/min	kW	%	
400FPQW1700-22-1 60	Φ 400	1700	22		980	160	82	2880
400FPQW1500-26-1 60	Φ 400	1500	26		980	160	83.5	2880
400FPQW2000-22-2 00	Φ 400	2000	22		980	200	82	3150
400FPQW1700-30-2 00	Φ 400	1700	30		980	200	83.5	3150
400FPQW180-32-25 0	Φ 400	1800	32		740	250	82	3250
400FPQW2000-30-2 80	Φ 400	2000	30		740	280	82.5	3250
500FPQW2500-10-1 10	Φ 500	2500	10		740	110	82	2100



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	η	
		m <sup>3</sup> /h		m	r/min	kW	%	
	mm							kg
500FPQW2000-15-1 10	Φ 500	2000		15	740	110	83	2100
500FPQW2800-10-1 32	Φ 500	2800		10	740	132	82	2250
500FPQW3200-10-1 60	Φ 500	3600		10	740	160	83	2280
500FPQW2600-15-1 60	Φ 500	2600		15	740	160	83	2280
500FPQW2000-20-1 60	Φ 500	2000		20	740	160	82	2280
500FPQW3000-15-2 00	Φ 500	3000		15	740	200	82	2280
500FPQW2500-20-2 00	Φ 500	2500		20	740	200	78	2280
500FPQW2800-18-2 20	Φ 500	2800		18	740	220	83	2350



# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div> <div>Para</div> <div>Type</div> </div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q		H	n	N	$\eta$	
		m <sup>3</sup> /h		m	r/min	kW	%	
	mm							kg
500FPQW2400-22-2 20	Φ 500	2400		22	740	220	84	2350
500FPQW4000-25-2 50	Φ 500	4000		15	980	250	84	2650
500FPQW2600-24-2 50	Φ 500	2600		24	980	250	82	2650
550FPQW3000-12-1 60	Φ 550	3000		12	740	160	85	2380
550FPQW4200-10-1 85	Φ 550	4200		10	740	185	82	2380
550FPQW3000-16-2 20	Φ 550	3000		16	740	200	85	2500
550FPQW5000-10-2 20	Φ 550	5000		10	740	220	84	2500





# SUBMERSIBLE PUMPS

## MODELS AND SPECIFICATIONS

<div>Para</div> <div>Type</div>	Outlet Dia	Capacity		Head	Speed	Power	Eff.	Weight
		Q	H		n	N	η	
		m <sup>3</sup> /h	m		r/min	kW	%	
600FPQW3500-12-1 85	Φ 600	3500	12		740	185	85	2580
600FPQW5500-10-2 50	Φ 600	5500	10		740	250	83	2580
600FPQW3750-17-2 50	Φ 600	3750	17		740	250	85	2580
600FPQW6000-10-2 80	Φ 600	6000	10		740	280	84	2600
700FPQW9000-6-25 0	Φ 700	9000	6		740	250	82	2800
700FPQW10000-6-2 80	Φ 700	10000	6		740	280	83	2800