



ROTO RUDRA

SOLAR PUMPING
SYSTEMS



- Solar Pumps
- Solar Motors
- Solar Controller



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Solar Helical Rotor Pumping Systems

Input Power (Wp)	Model Name	Head (m)	Flow (m ³ /h)	Page No.
500	RSSH 2.5-A	20	2.5	10
	RSSH 1.2-A	40	1.2	11
	RSSH 0.5-A	60	0.5	12
900	RSSH 2.5-C	70	2.5	13
	RSSH 0.8-C	90	0.8	14
	RSSH 1.2-C	120	1.2	15
1200	RSSH 2.0-C	100	2	16
	RSSH 1.6-C	120	1.6	17
1500	RSSH 8.5-D	40	8.5	18
	RSSH 2.0-D	150	2	19
	RSSH 1.4-D	200	1.4	20
2000	RSSH 1.2-E	300	1	21
3000	RSSH 8.5-F	70	8.5	22

Solar Centrifugal Pumping Systems

Input Power (Wp)	Model Name	Head (m)	Discharge (m ³ /h)	Page No.
900	RSSC 05-C	30	5	23
	RSSC 03-C	50	3	24
	RSSC 01-C	90	2	25
1200	RSSC 05-C	30	5	26
	RSSC 01-C	100	2	27
1500	RSSC 05-D	50	5	28
	RSSC 01-D	100	2	29
1800/2000	RSSC 09-E	30	9	30
	RSSC 02-E	120	2	31
3000	RSSC 14-F	30	17	32
	RSSC 09-F	50	9	33
	RSSC 06-F	70	8	34
	RSSC 05-F	100	5	35
4800	RSSC 38-H	20	46	36
	RSSC 27-H	30	30	37
	RSSC 17-H	50	17	38
	RSSC 09-H	70	9	39
	RSSC 08-H	100	7	40
	RSSC 05-H	150	5	41
6750	RSSC 56-L	20	60	42
	RSSC 22-L	50	30	43
	RSSC 17-L	70	17	44
	RSSC 09-L	100	9	45
	RSSC 05-L	150	5	46
9000	RSSC 48-M	30	60	47
	RSSC 42-M	40	46	48
	RSSC 22-M	50	30	49
	RSSC 23-M	70	30	50
	RSSC 15-M	100	17	51
	RSSC 09-M	150	9	52
	RSSC 05-M	250	5	53

4. Technical Data

- a. Pump Construction – Helical, Centrifugal 54
- b. Motor Construction and Technical Data 55 - 57

1. Product Data-

a) Introduction:

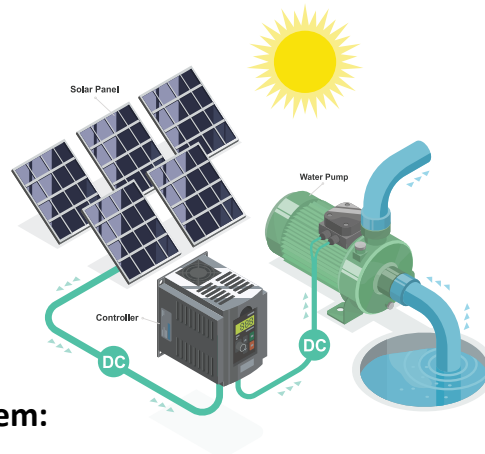
A solar water pumping system is essentially an electrical pump system in which the electricity is provided by one or several photovoltaic (PV) panels. A typical solar powered pumping system consists of a solar panel that generates power and supplied to motor, which in turn powers a pump.

With the cost of diesel and electricity rising constantly, solar powered water pumps are the perfect alternative, as these have a low maintenance cost and ensure a long product life.

The water supplied by the solar water pump can be used to irrigate crops, drinking water supply, livestock watering, gardening & fisheries etc.

Benefits of Solar Water Pumps:

- Easy installation and maintenance
- No grid supply required
- Long operating life
- Highly reliable and durable
- Eco-friendly
- No fuel Cost



b) Roto Rudra Solar pumping System:

The Roto Rudra Solar pumping systems are sustainable solution based on renewable energy such as Solar. As a free energy source, it can be combined with pumps and motors to fulfil the need of water requirement. The system components are:

- Helical or Centrifugal submersible pump
- Energy efficient submersible PMSM Motor (10 pole design)
- Solar Controller
- Solar Accessories (Optional):
 - solar panels
 - PV Stand
 - Accessories Kit

Pumps –

The Roto Rudra Solar Pumps offer two pumping technologies:

- Helical rotor pumps (suitable for 3" and above bore well)
- Centrifugal pumps (suitable for 4" and above bore well)

Motors –

The Roto Rudra Solar Motors are 10 pole Permanent Magnet motor design, Provides best in class energy efficiency and longer life.

Solar Helical Rotor Pumps-set

Non-Return Valve

Designed for short closing time to avoid water hammer

Can also be used for Horizontal installations

Rotor & Stator

Optimized geometry to provide max. capacity at low torque

Solid rotor design for stability and longer life

Lower starting torque and effective sealing line (Zero Leakage) improves volumetric efficiency

Flexible shaft

Designed for smooth transmission of load

Optimized length for compact design and long life



Solar Centrifugal Pump-set

Non-Return Valve

Designed for short closing time to avoid water hammer

Can also be used for Horizontal installations

Impeller & Diffuser

Superior design gives higher hydraulic performance, greater efficiency and provides higher resistance against wear and tear

PMSM Motors

Unique 10 pole motor design for higher efficiency and longer life

Robust and Compact Design

Low torque ripple

Eliminates the use of LC filter up to 200 m

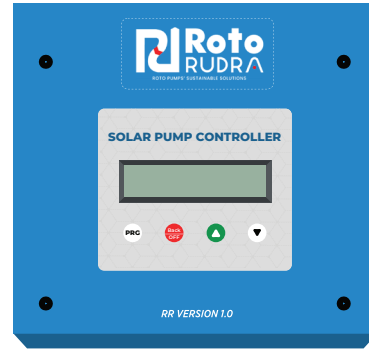
Pressure balanced for deep submergence and dynamically balanced rotating parts

Eliminates rotor losses resulting significant reduction in motor current & temperature rise.



Solar Controller (RR Version 1.0) -

Roto Rudra solar controller has been designed to optimize performance for solar pumping systems. Variable speed control allows smooth pump flow under varying sun intensities



Features:

- MPPT (Maximum Power point Tracking):
- RMS (Remote Monitoring System) with connectivity through mobile and laptop
- Visual LED & LCD based indications (Faults are descriptive and self-explanatory)
- Over and under Voltage protection
- Dry run protection
- PV Surge Protection
- Reverse Polarity protection
- Thermal overload protection for controller
- Operational in Gird connectivity (Optional)
- IP 65 enclosure class allows both outdoor and indoor installation.

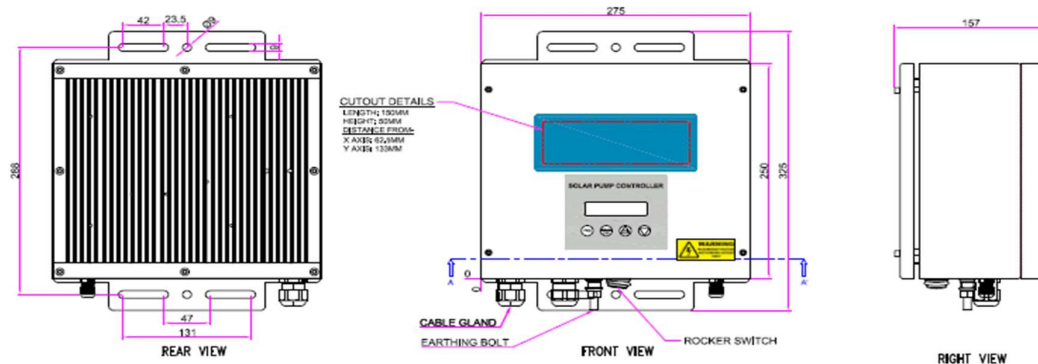
Technical Details:

- Power size: 0.5 HP to 10 HP*
- IEC 61683, IEC 60068-2(6,30) compliance

Power Rating (Hp)	Protection	Max DC Input Voltage (in V)	MPPT Voltage Range (in V)	Max Controller Output Voltage (in V)	Max Controller Output Current (in A)	Weight (in kg)
0.5	IP65	100	30-70	50	12	10
1.0 & 2.0	IP65	225	70-175	120	15	10
3.0 & 5.0	IP65	450	180-380	300	15	12
7.5 & 10.0	IP65	900	350-750	380	15	12

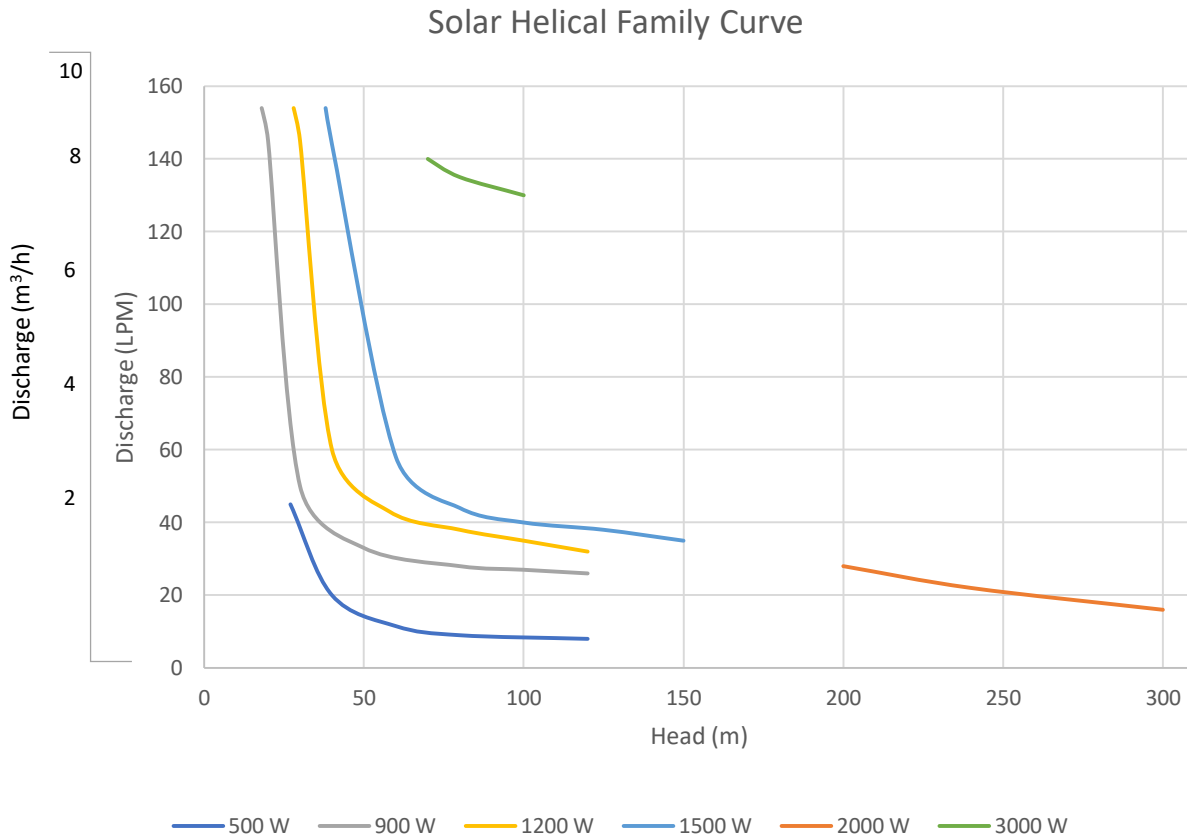
*Above control parameters are compatible with MonoPerc PV panels and can also be configured for Poly PV panels on requirement basis

Dimensions:



c) Product Range Curve & Nomenclature:

Helical Rotor Type (RSSH Series)



Helical Pump Nomenclature

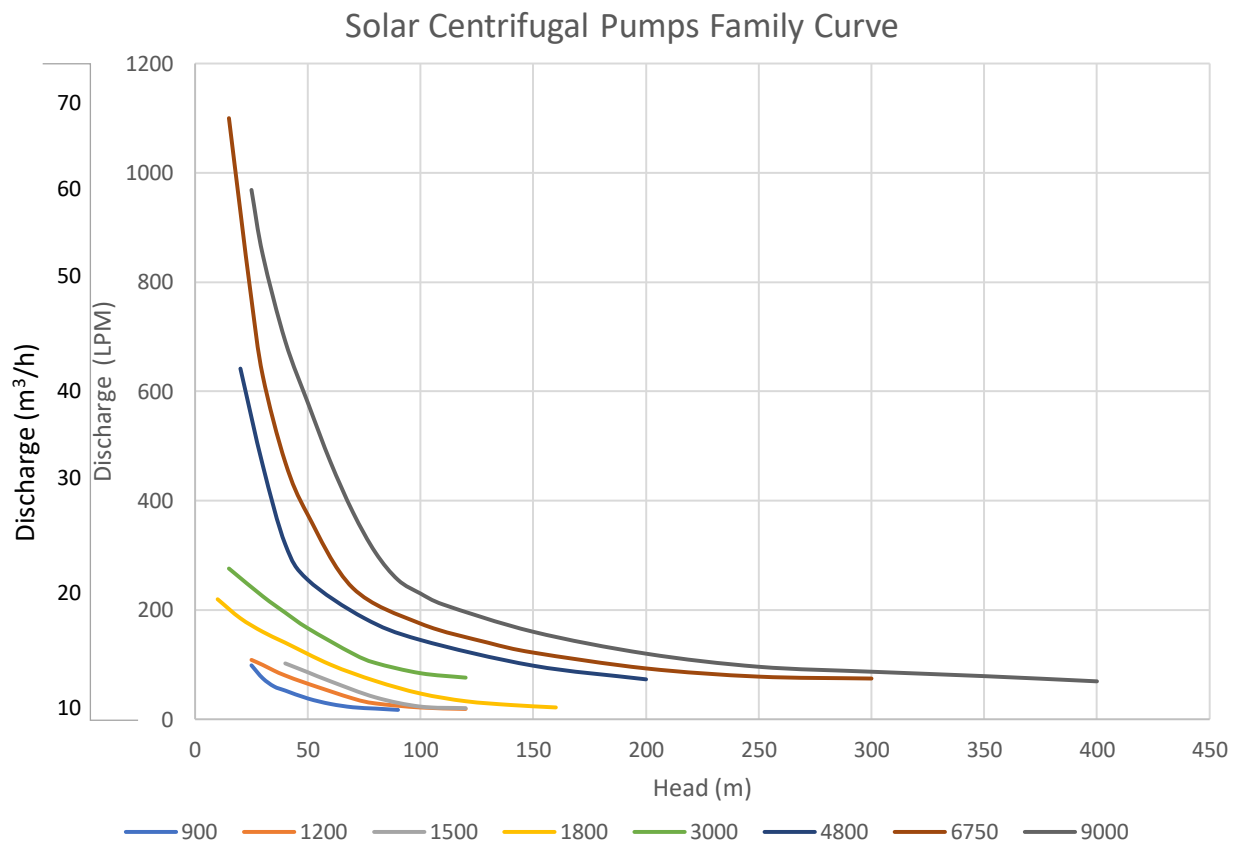
	RSSH	0.8	- C
Series			
Duty flow (M3/h)			
Input Solar Power Indicator			

* Duty flow will be at 3000 rpm.

Input solar power indicator chart –

A = 500 W	C = 1200 W	E = 2000 W
C = 900 W	D = 1500 W	F = 3000 W

Centrifugal Type (RSSC Series)



Centrifugal Pump Nomenclature

	RSSC	02	- C
Series			
Duty flow (M3/h)			
Input Solar Power Indicator			

* Duty flow will be at 3000 rpm.

Input solar power indicator chart –

C = 900 W	E = 1800 W	H = 4800 W
C = 1200 W	E = 2000 W	L = 6750 W
D = 1500 W	F = 3000 W	M = 9000 W

d) Application:

According to each individual need, solar water pumps can be applied for a range of different purposes where pumping water is needed. Main applications include:

- a) crops and plant irrigation
- b) Schools, Hospitals, Villages etc.
- b) drinking water supply
- c) swimming pools
- d) industrial water processing
- e) fountains
- f) Farming
- g) drinking Water for Livestock
- h) Water pumping from Lake and Ponds.

Correct sizing of the pump, motor and controlling devices as well as detailed system design according to the location and usage of the solar water pump is essential to guarantee the optimal system performance.

e) Pumping Liquid:

Roto Rudra Solar pumps are suitable for clean water pumping from bore well/ ponds/ river. Pumping liquid should be non-aggressive, not containing solid or particles that may damage the pumping elements.

Application criteria -

Liquid temperature: 0 °C to +40 °C.

Maximum allowed sand content: 50 g/m³.

Installations: Vertical or Horizontal (with oil filled motors only)

2. Features and Benefits

- More than 55 years of experience in pumping sector
- Superior elastomer technology for stator manufacturing including in-house compound formulation, preparation and mould designing facility
- Unique 10 pole motor design for high efficiency and longer life
- High quality materials (SS304 or SS316) used to have non-corrodible property
- Robust IP65 Solar controller dust and weather proof
- Modular design for longer life and easy operation
- Remote monitoring system enables to view and control the system remotely
- No dependency on grid/ diesel hence more savings.
- Featured to protect from dry run, Overvoltage, Undervoltage and Short Circuit
- Wide voltage ranges from 30-380 V

3. Performance Curve & Data -

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

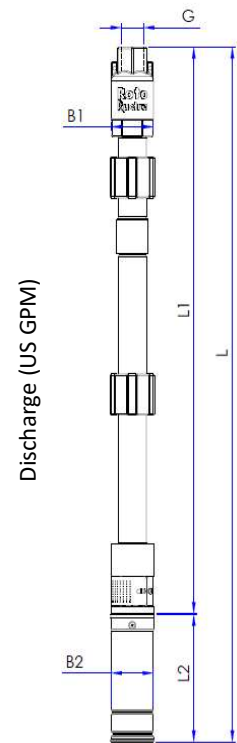
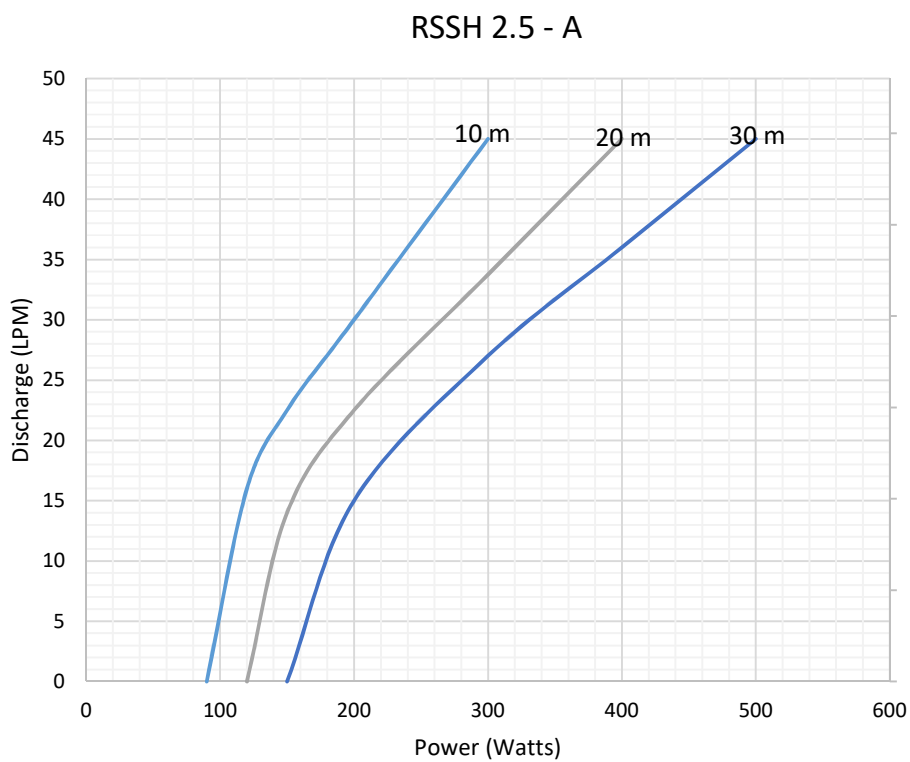
MODEL: RSSH 2.5 - A

500 WATT, 30V Motor, 3x3

SYSTEM CODE: 20B001NEA1A62N

DUTY HEAD (METER): 20m

DC Solar	INPUT POWER (WATTS)						
	500	400	300	200	150	120	90
HEAD (M)	FLOW (LPM)						
30	45	36	27	15	0		
20	46	45	34	23	14	0	
10	47	46	45	30	23	16	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20B001NEA1A62X	12	32	930 + 231	ASRSPT030P020	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

MODEL: RSSH 1.2 - A

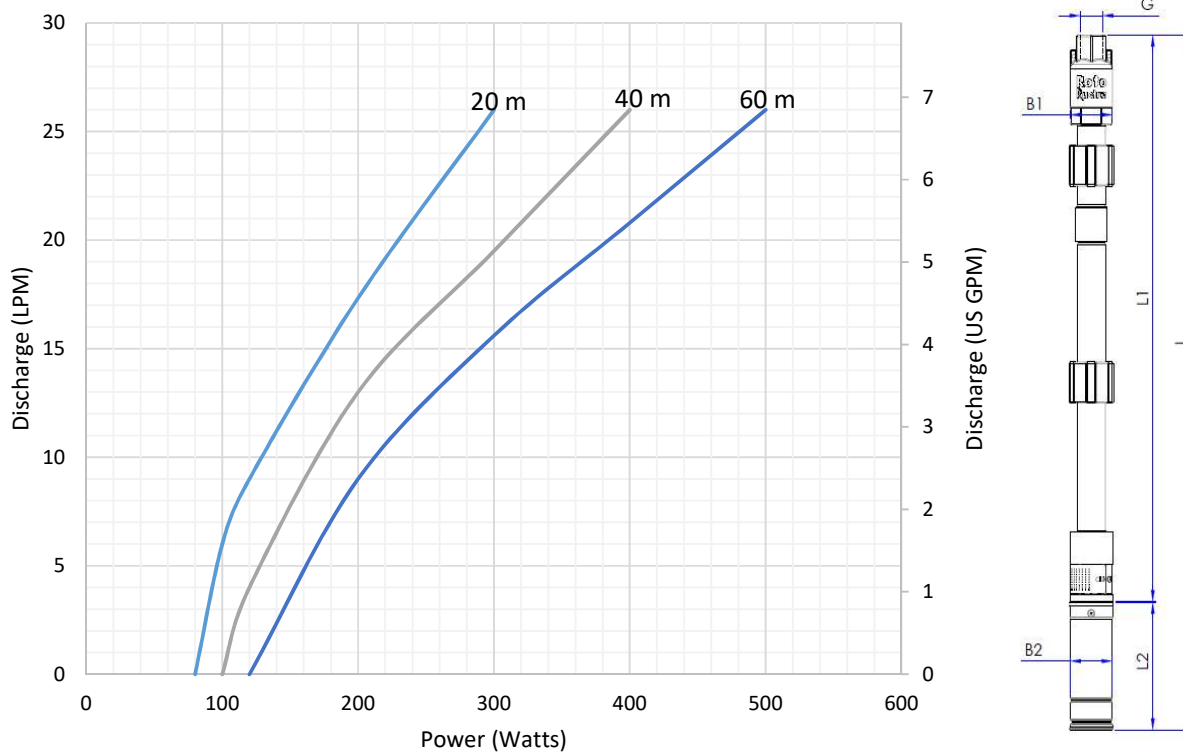
500 WATT, 30V Motor, 3x3

SYSTEM CODE: 20D002NEA1A62N

DUTY HEAD (METER): 40m

DC Solar	INPUT POWER (WATTS)						
	500	400	300	200	120	100	80
HEAD (M)	FLOW (LPM)						
60	26	21	16	9	0		
40	27	26	20	13	4	0	
20	28	27	26	17	9	6	0

RSSH 1.2-A



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20D002NEA1A62X	11	32	887 + 231	ASRSPT030P040	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

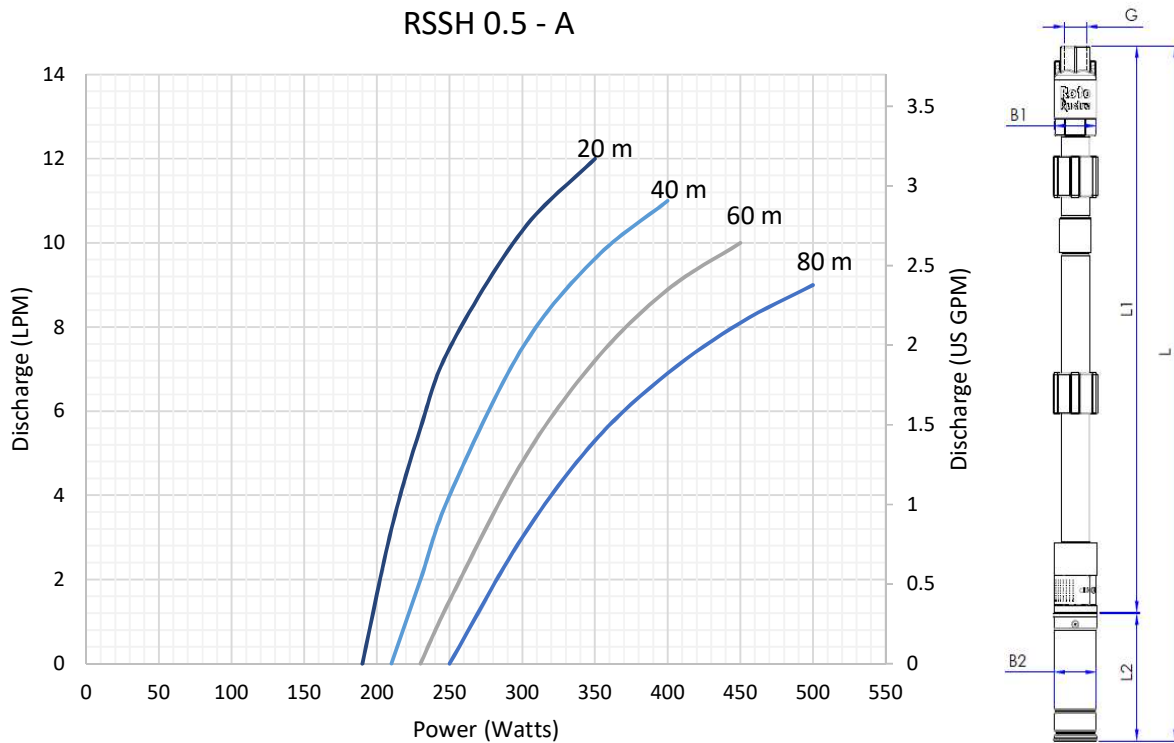
MODEL: RSSH 0.5 - A

500 WATT, 30V Motor, 3x3

SYSTEM CODE: 20F002NEA1A62N

DUTY HEAD (METER): 60m

DC Solar	INPUT POWER (WATTS)								
	500	450	400	350	300	250	230	210	190
HEAD (M)	FLOW (LPM)								
80	9	8	7	5	3	0			
60	11	10	9	7	5	2	0		
40	13	12	11	10	8	4	2	0	
20	15	14	13	12	10	8	6	3	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20F002NEA1A62X	11	32	887 + 231	ASRSPT030P060	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

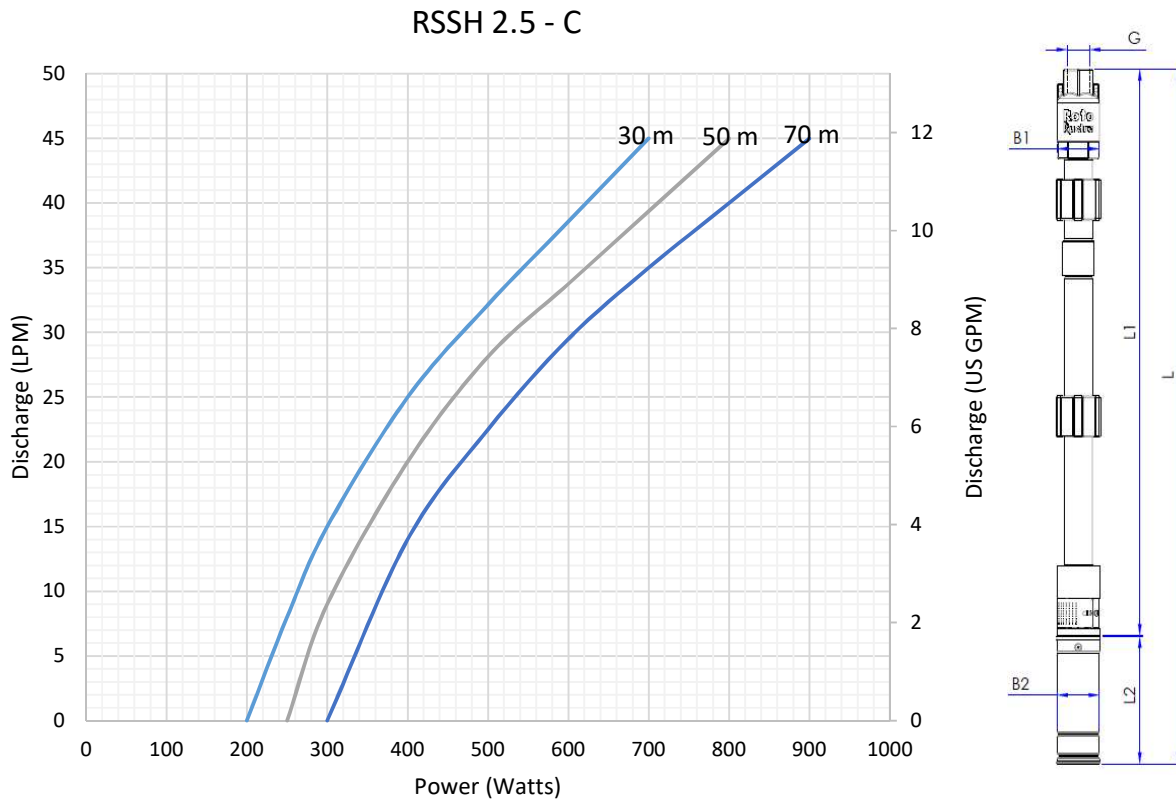
MODEL: RSSH 2.5 - C

900 WATT, 50V Motor, 3x3

SYSTEM CODE: 20G001NEC1B62N

DUTY HEAD (METER): 70m

DC Solar	INPUT POWER (WATTS)								
	900	800	700	600	500	400	300	250	200
HEAD (M)	FLOW (LPM)								
70	45	40	35	30	23	14	0		
50	46	45	39	34	28	20	9	0	
30	47	46	45	39	32	26	15	8	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20G001NEC1B62X	12	32	930 + 261	CSRSPT050P070	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

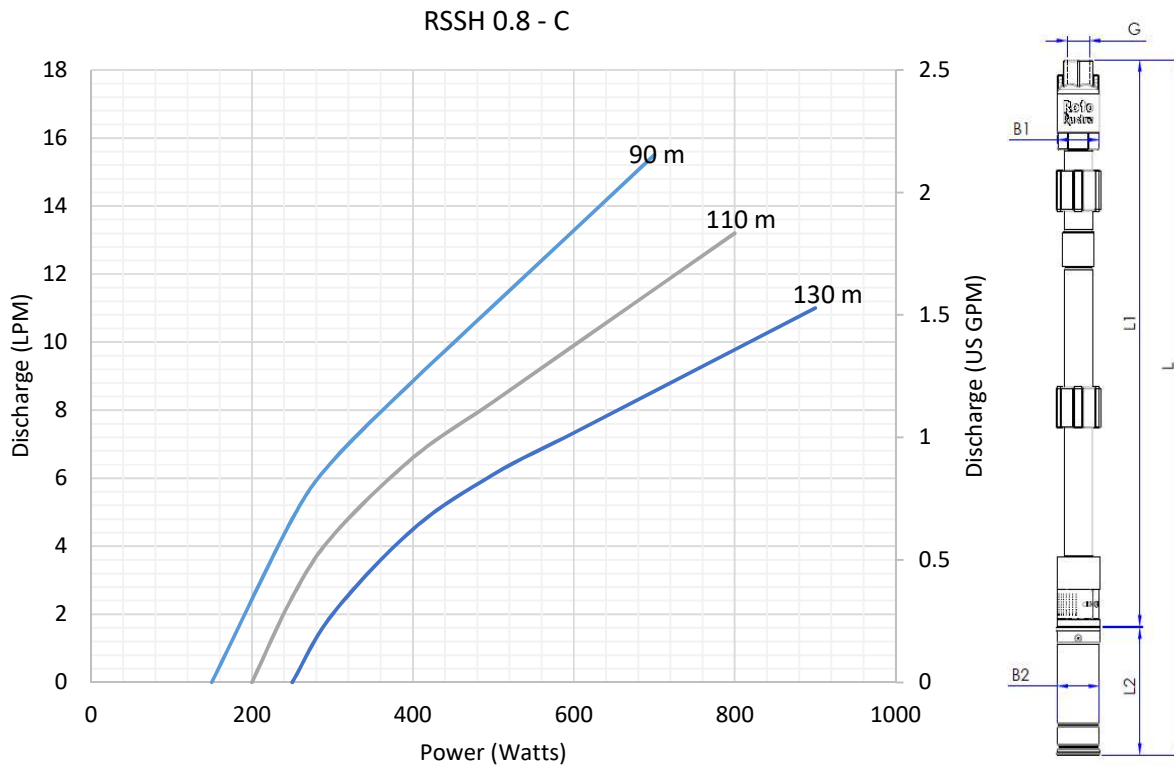
MODEL: RSSH 0.8 - C

900 WATT, 50V Motor, 3x3

SYSTEM CODE: 20J002NEC1B62N

DUTY HEAD (METER): 110m

DC Solar	INPUT POWER (WATTS)									
	900	800	700	600	500	400	300	250	200	150
HEAD (M)	FLOW (LPM)									
130	11	10	9	7	6	5	2	0		
110	14	13	12	10	8	7	4	3	0	
90	18	17	16	13	11	9	7	5	2	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20G001NEC1B62X	12	32	930 + 261	CSRPT050P070	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

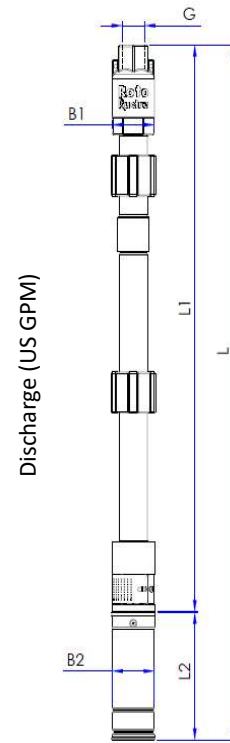
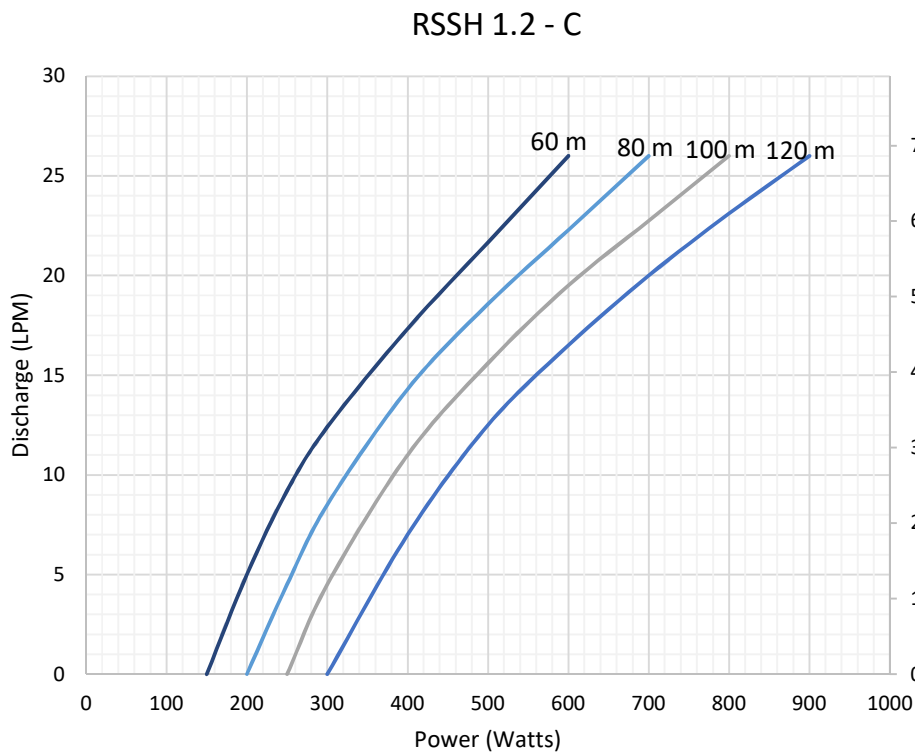
MODEL: RSSH 1.2 - C

900 WATT, 50V Motor, 3x3

SYSTEM CODE: 20L002NEC1B62N

DUTY HEAD (METER): 100m

DC Solar	INPUT POWER (WATTS)									
	900	800	700	600	500	400	300	250	200	150
HEAD (M)	FLOW (LPM)									
120	26	23	20	17	13	7	0			
100	27	26	23	20	16	11	5	0		
80	28	27	26	22	19	14	9	4.5	0	
60	29	28	27	26	22	17	12	9.2	5	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20L002NEC1B62X	12	32	887 + 261	CSRSPT050P120	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

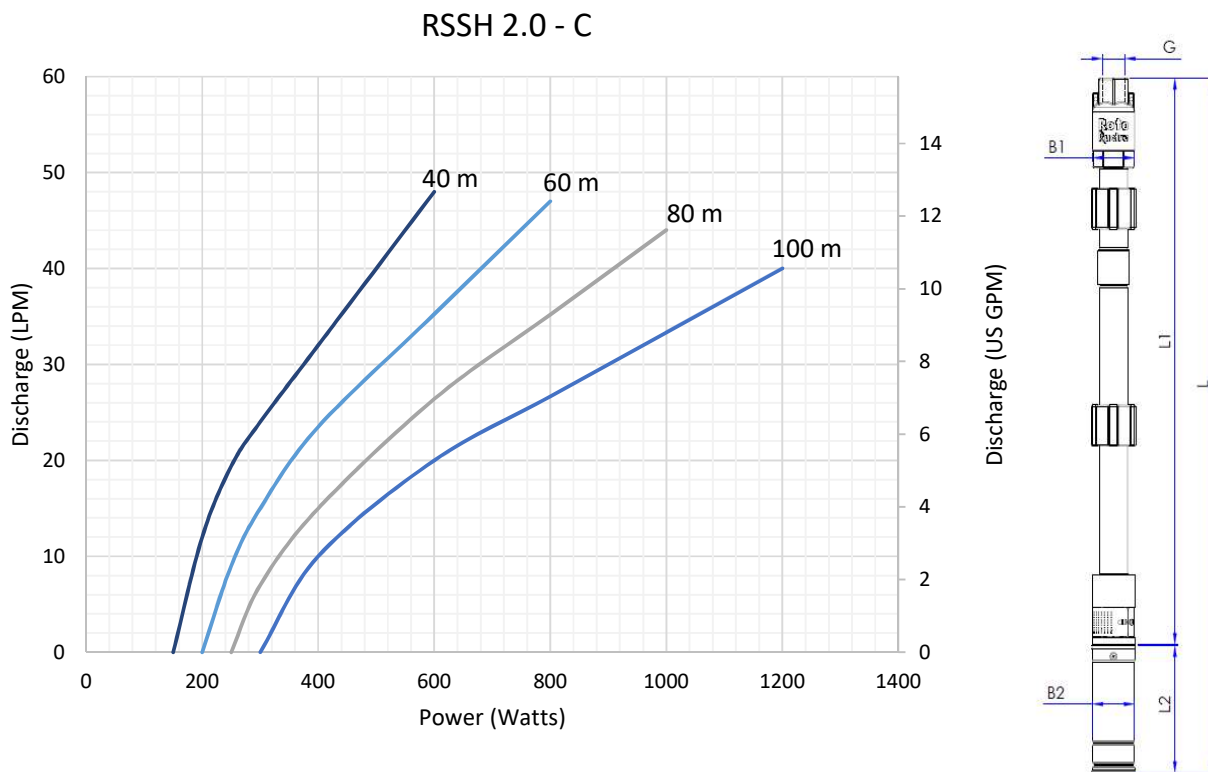
MODEL: RSSH 2.0 - C

1200 WATT, 70V Motor, 3x3

SYSTEM CODE: 20K002NEC1B62N

DUTY HEAD (METER): 100m

DC Solar	INPUT POWER (WATTS)								
	1200	1000	800	600	400	300	250	200	150
HEAD (M)	FLOW (LPM)								
100	40	33	27	20	10	0			
80	45	44	35	26	15	7	0		
60	49	48	47	35	24	15	9	0	
40	52	51	49	48	33	25	19	12	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20K002NEC1B62X	12.2	32	972+261	CSRSPT070P100	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

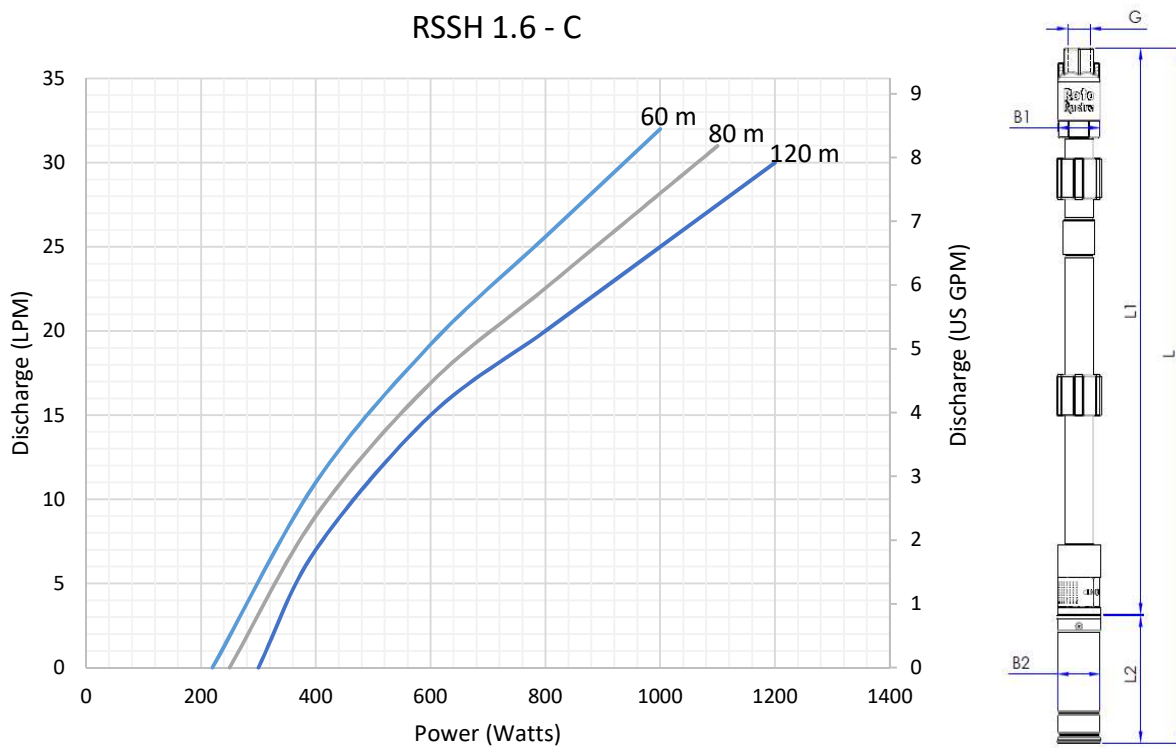
MODEL: RSSH 1.6 - C

1200 WATT, 70V Motor, 3x3

SYSTEM CODE: 20L004NEC1B62N

DUTY HEAD (METER): 80m

DC Solar	INPUT POWER (WATTS)								
	1200	1100	1000	800	600	400	300	250	220
HEAD (M)	FLOW (LPM)								
120	30	25	20	15	15	7	0		
80	31	30	28	23	17	9	4	0	
60	32	31	32	26	19	11	6	3	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20L004NEC1B62X	13	32	1033 + 261	CSRSP070P120	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

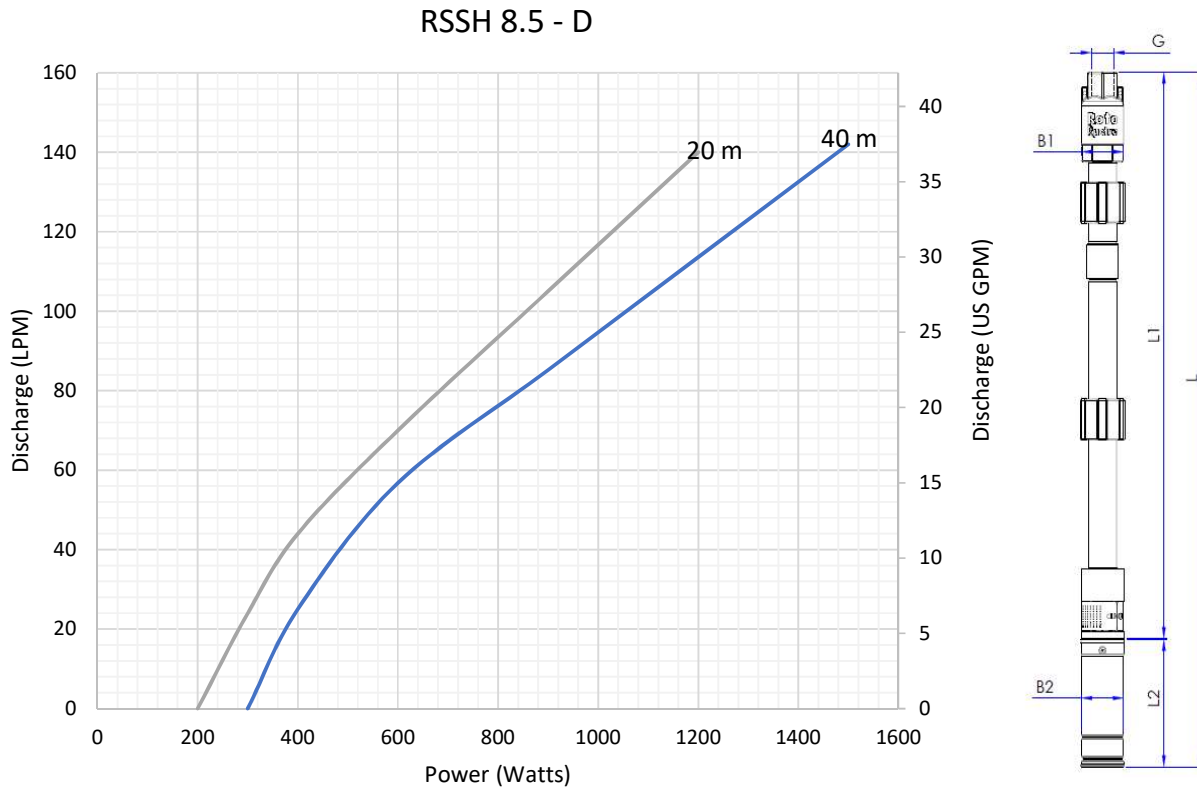
MODEL: RSSH 8.5 - D

1500 WATT, 70V Motor, 3x3

SYSTEM CODE: 20D001NED1B62N

DUTY HEAD (METER): 80m

DC Solar	INPUT POWER (WATTS)						
	1500	1200	900	600	400	300	200
HEAD (M)	FLOW (LPM)						
40	142	114	85	57	25	0	
20	144	140	105	70	47	30	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20D001NED1B62X	13	32	944 + 291	DSRSPT070P040	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

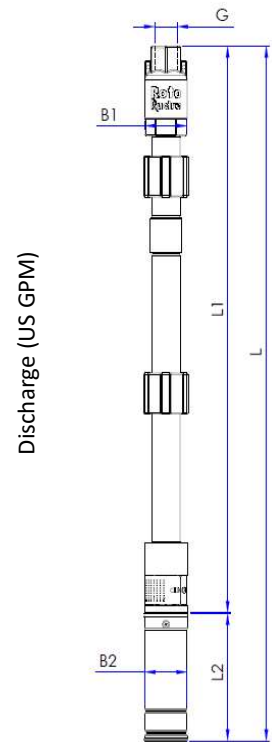
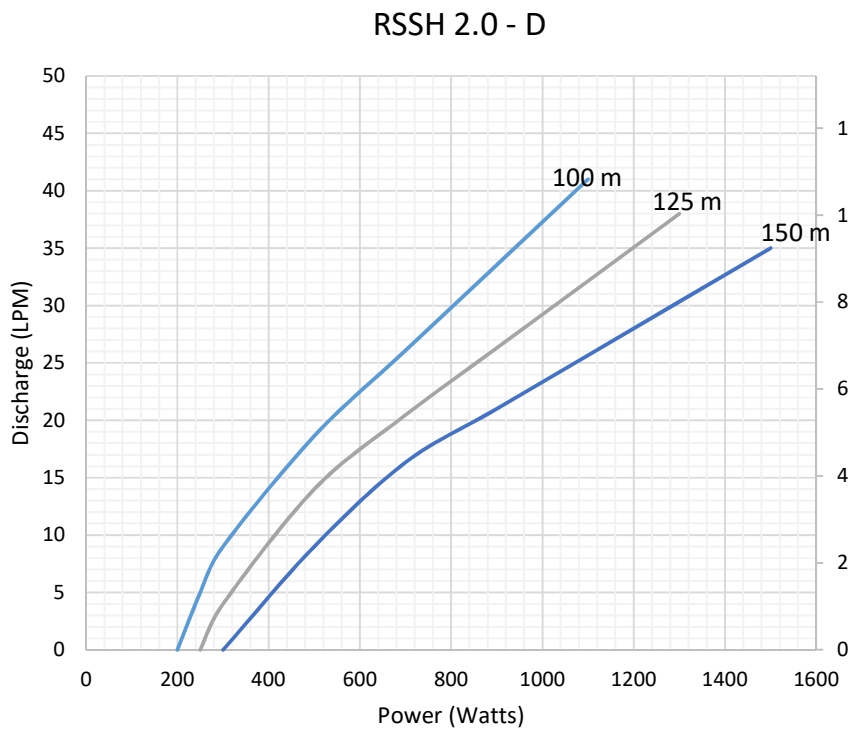
MODEL: RSSH 2.0 - D

1500 WATT, 70V Motor, 3x3

SYSTEM CODE: 20N002NED1C62N

DUTY HEAD (METER): 150 m

DC Solar	INPUT POWER (WATTS)								
	1500	1300	1100	900	700	500	300	250	200
HEAD (M)	FLOW (LPM)								
150	35	30	26	21	16	9	0		
125	39	38	32	26	20	14	4	0	
100	45	43	41	34	26	19	9	5	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20N002NED1C62X	13	32	972+291	DSRSPT070P150	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

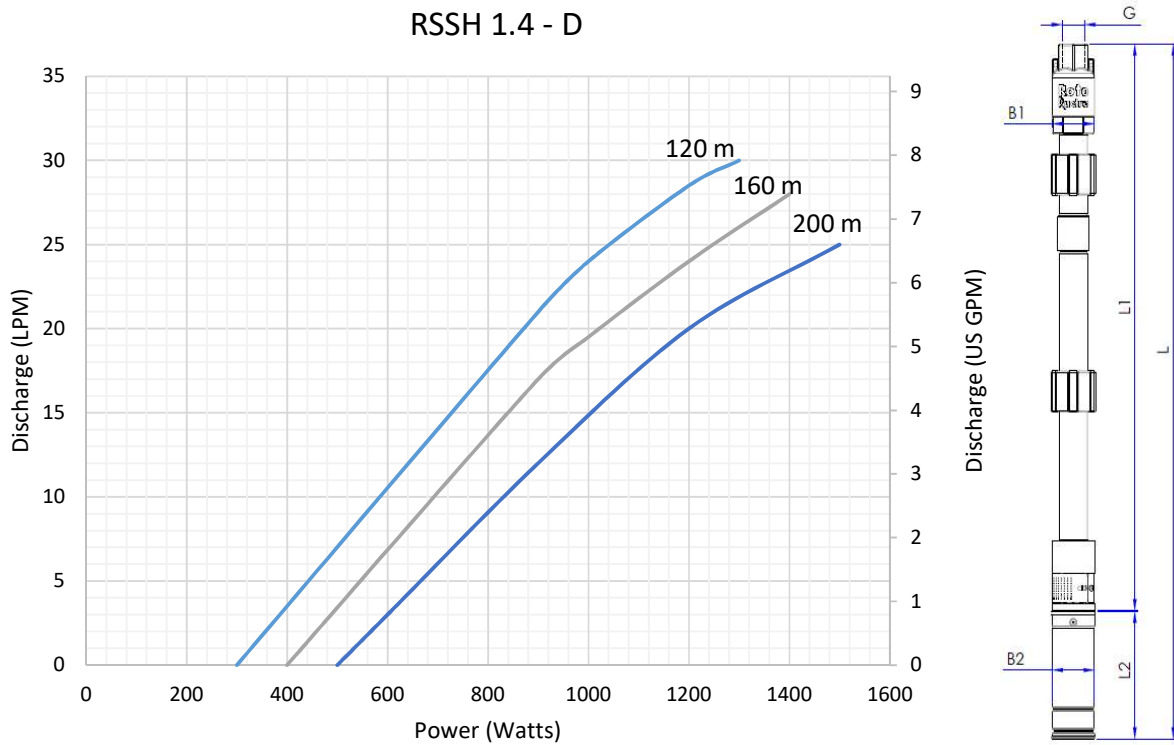
MODEL: RSSH 1.4 - D

1500 WATT, 70V Motor, 3x3

SYSTEM CODE: 20Q004NED1C62N

DUTY HEAD (METER): 200 m

DC Solar	INPUT POWER (WATTS)						
	1500	1200	900	600	500	400	300
HEAD (M)	FLOW (LPM)						
200	25	20	12	3	0		
160	27	26	24	20	17	0	
120	29	26	30	29	24	21	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20Q004NED1C62X	14	32	1033+291	DSRSPT070P200	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

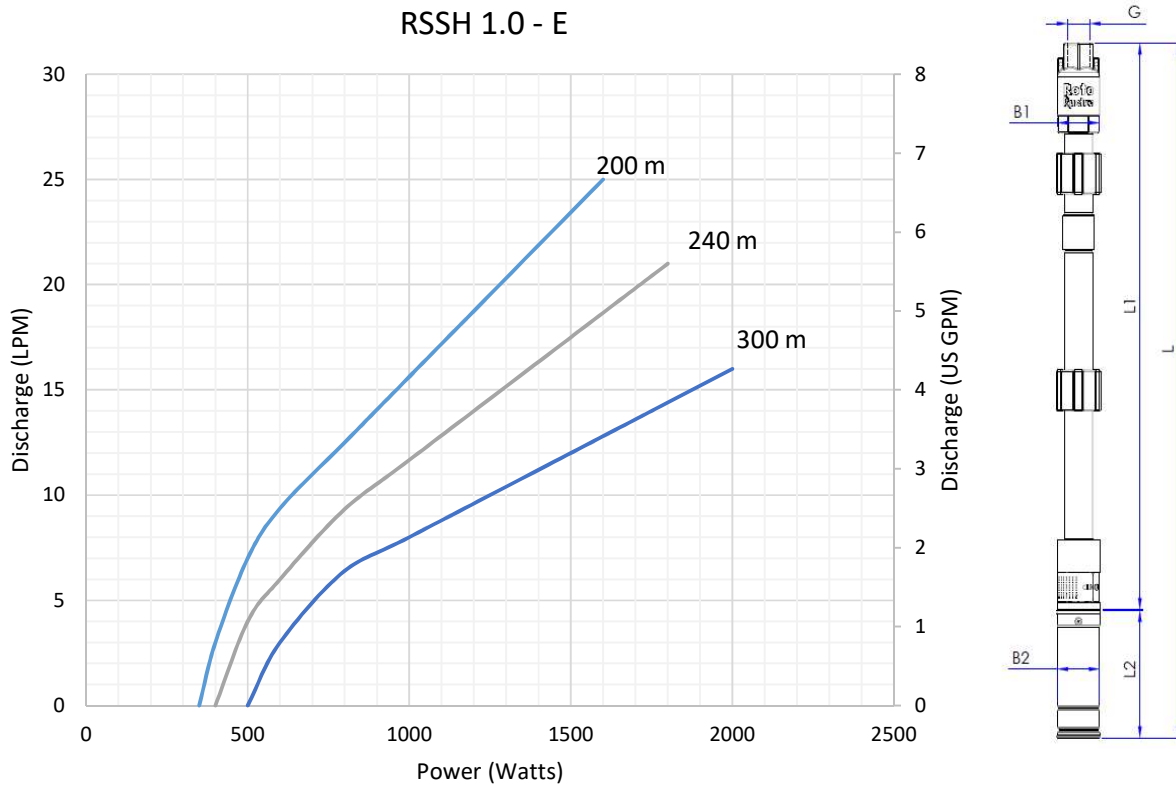
MODEL: RSSH 1.2 - E

2000 WATT, 100V Motor, 3x3

SYSTEM CODE: 20S004NEE1D62N

DUTY HEAD (METER): 300 m

DC Solar	INPUT POWER (WATTS)								
	2000	1800	1600	1000	800	600	500	400	350
HEAD (M)	FLOW (LPM)								
300	16	14	13	8	6	3	0		
240	22	21	19	12	9	6	4	0	
200	28	26	25	16	13	9	7	3	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
20S004NEE1D62X	15	32	1033+336	ESRSPT100P300	10	307 X 275 X 181

SOLAR SUBMERSIBLE HELICAL ROTOR PUMP-SET

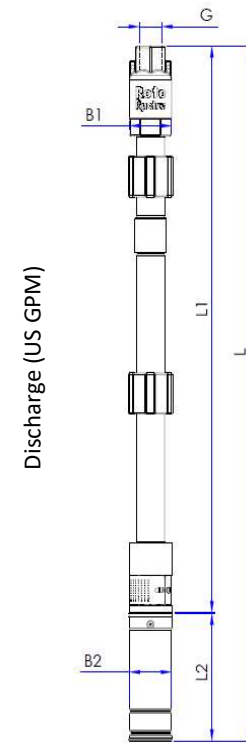
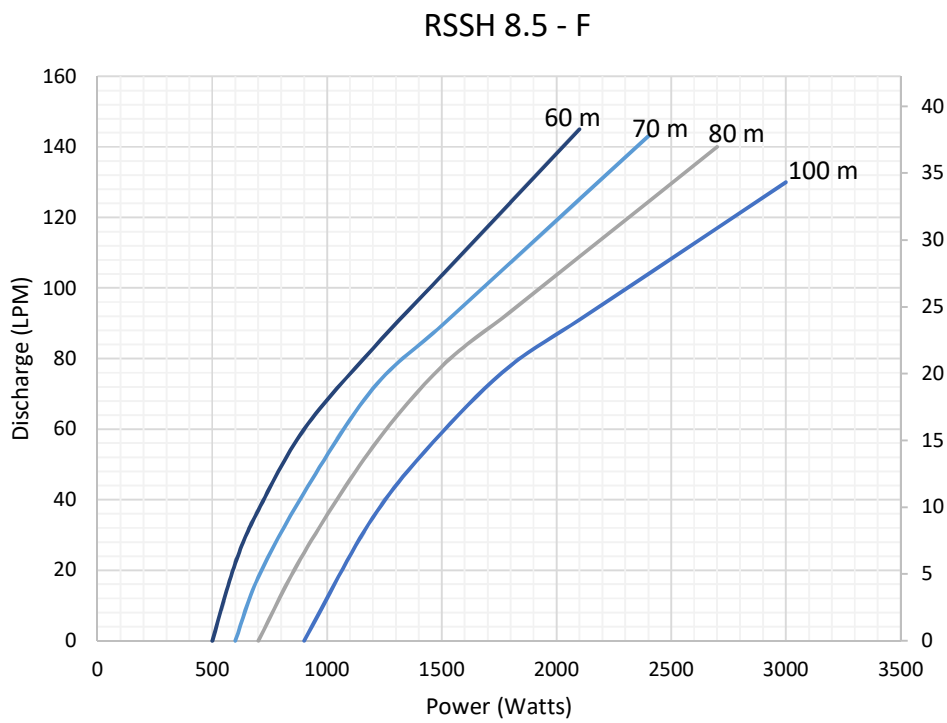
MODEL: RSSH 8.5 - F

3000 WATT, 150V Motor, 4x4

SYSTEM CODE: 21G001NEF1G62N

DUTY HEAD (METER): 70 m

DC Solar	INPUT POWER (WATTS)											
	3000	2700	2400	2100	1800	1500	1200	900	700	600	500	
HEAD (M)	FLOW (LPM)											
100	130	117	104	91	78	59	35	0				
80	142	140	124	109	93	78	55	25	0			
70	145	144	143	125	107	89	72	42	18	0		
60	148	147	146	145	124	104	83	60	37	22	0	



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L 1 + L 2 [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
21G001NEF1G62X	7.90	32	944	FSRSPT230P070	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

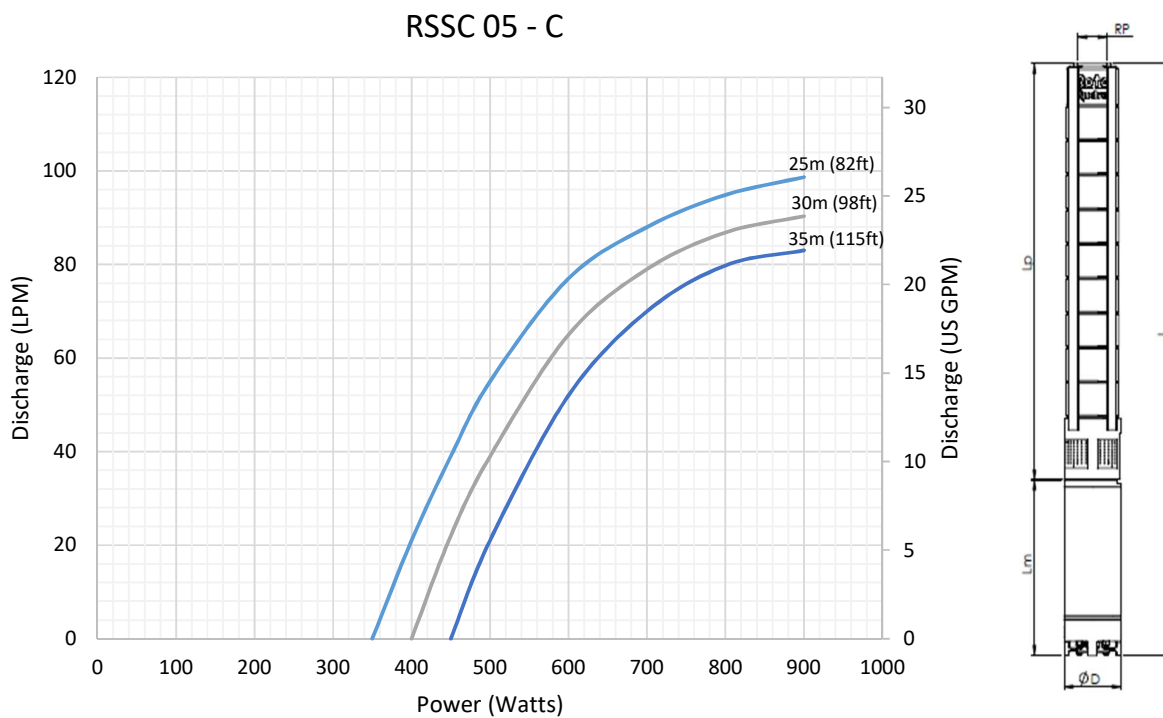
MODEL: RSSC 05 - C

900 WATT, 50V Motor, 4x4

SYSTEM CODE: 12C008PAC1B60L

DUTY HEAD (METER): 30 m

DC Solar	INPUT POWER (WATTS)							
	900	800	700	600	500	450	400	350
HEAD (M)	FLOW (LPM)							
35	83	80	70	52	21	0		
30	90	87	79	65	39	22	0	
25	99	95	88	77	55	39	21	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12C008PAC1B60X	11.9	40	322+256.5	CSRUPWBC030	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

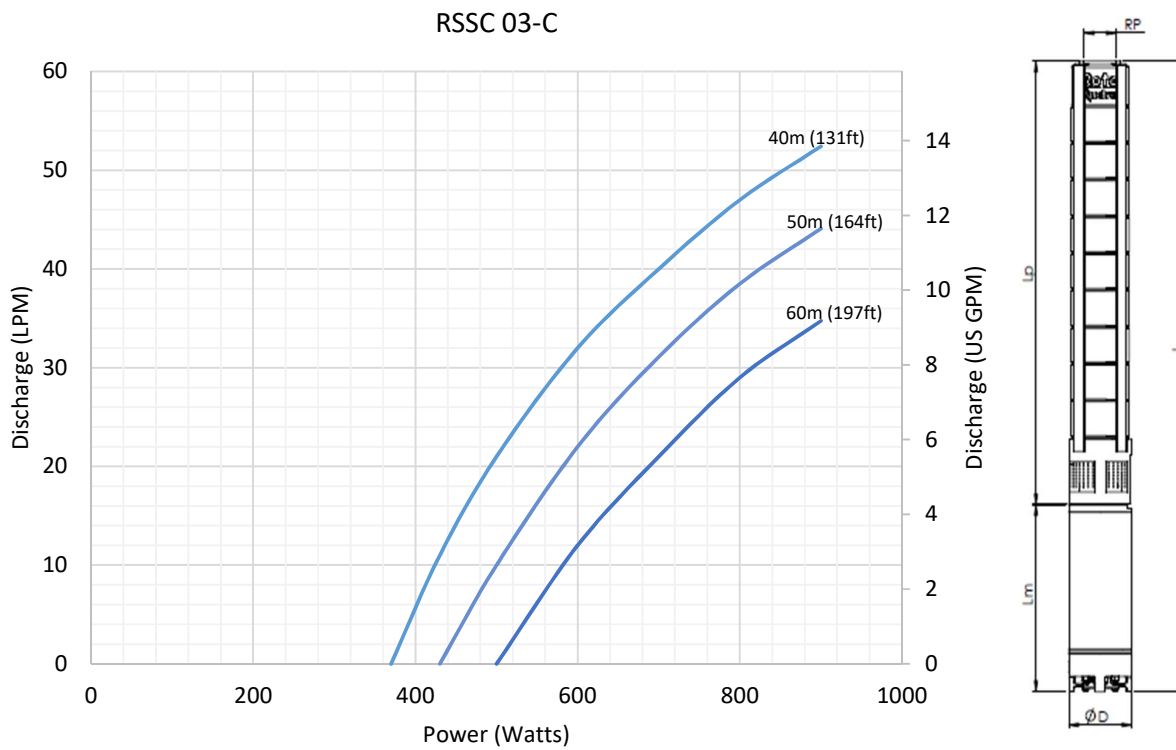
MODEL: RSSC 02 - C

900 WATT, 50V Motor, 4x4

SYSTEM CODE: 12F012NAC1B60L

DUTY HEAD (METER): 50 m

DC Solar	INPUT POWER (WATTS)						
	900	800	700	600	500	430	370
HEAD (M)	FLOW (LPM)						
60	35	29	21	12	0		
50	44	39	31	22	10	0	
40	52	47	40	32	21	11	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12F012NAC1B60X	14	32	406+257	CSRUPWBC060	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

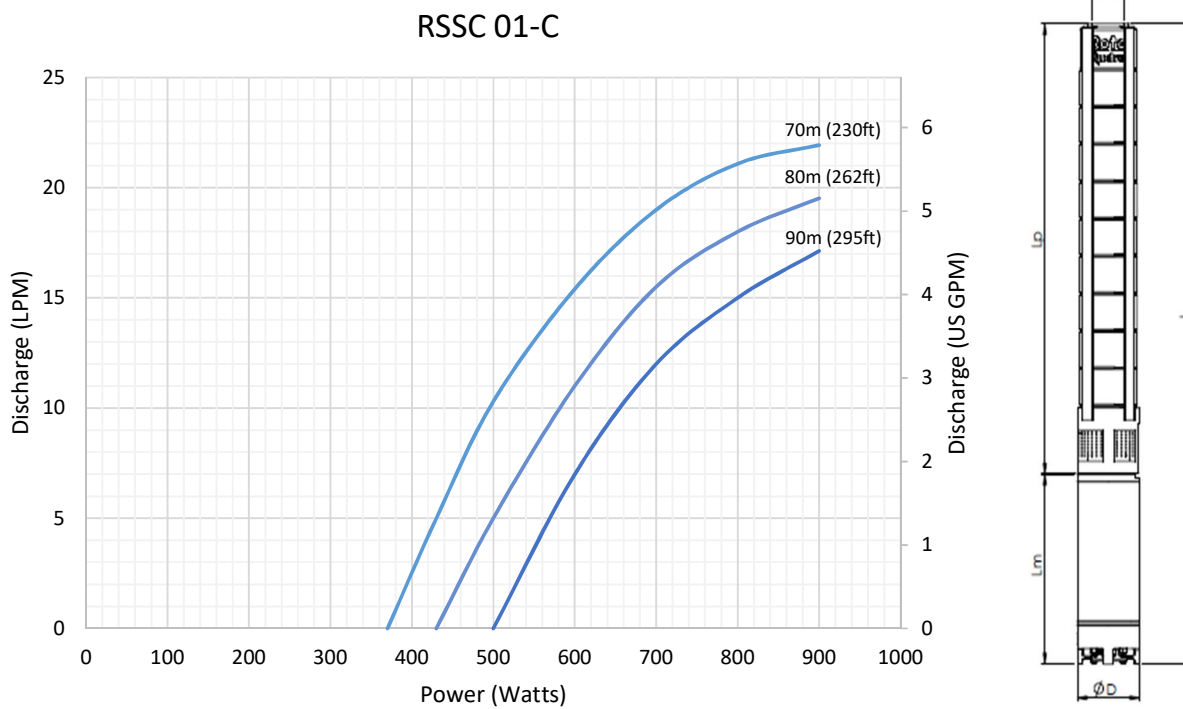
MODEL: RSSC 01 - C

900 WATT, 50V Motor, 4x4

SYSTEM CODE: 12J018NAC1B60L

DUTY HEAD (METER): 80 m

DC Solar	INPUT POWER (WATTS)						
	900	800	700	600	500	430	370
HEAD (M)	FLOW (LPM)						
90	17	15	12	7	0		
80	20	18	16	11	5	0	
70	22	21	19	15	10	5	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12J018NAC1B60X	14.7	32	532+257	CSRUPWBC090	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

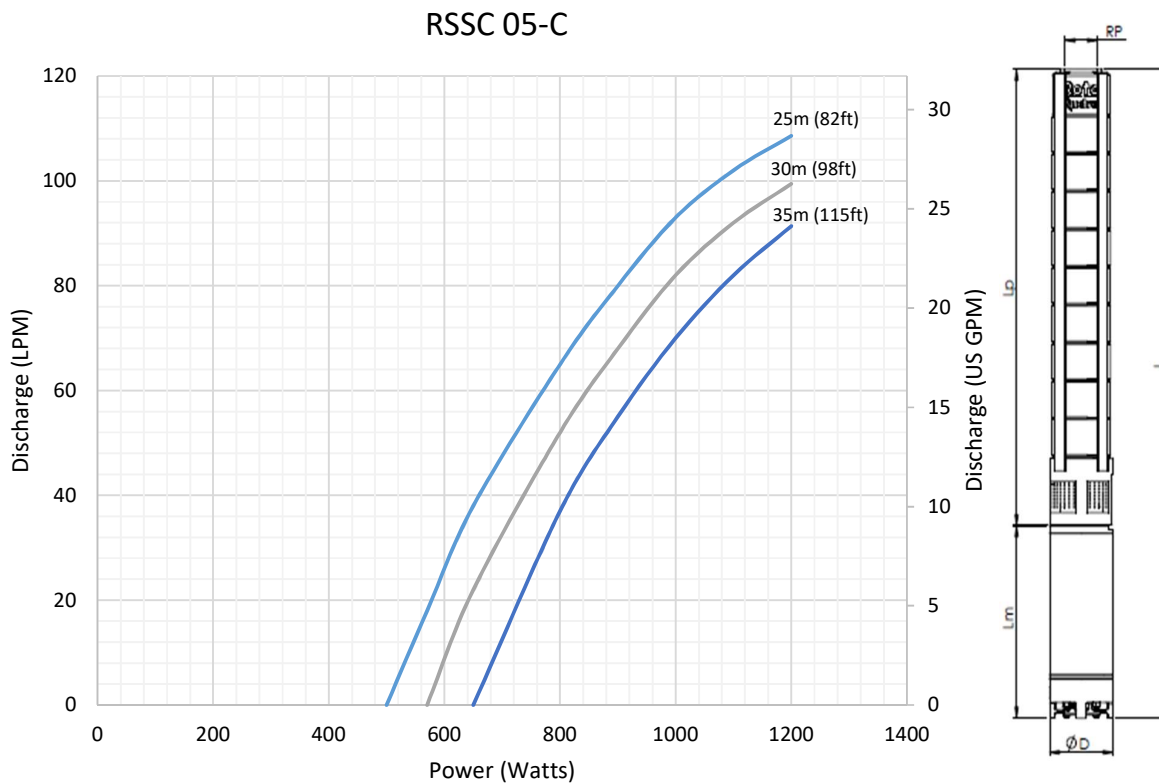
MODEL: RSSC 05 - C

1200 WATT, 50V Motor, 4x4

SYSTEM CODE: 12C008PAC1C60L

DUTY HEAD (METER): 30 m

DC Solar	INPUT POWER (WATTS)							
	1200	1100	1000	900	800	650	570	500
HEAD (M)	FLOW (LPM)							
35	91	82	70	55	37	0		
30	99	92	82	68	52	22	0	
25	109	102	93	80	65	38	18	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12C008PAC1C60X	12	40	322 + 257	CSRUPWCC030	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

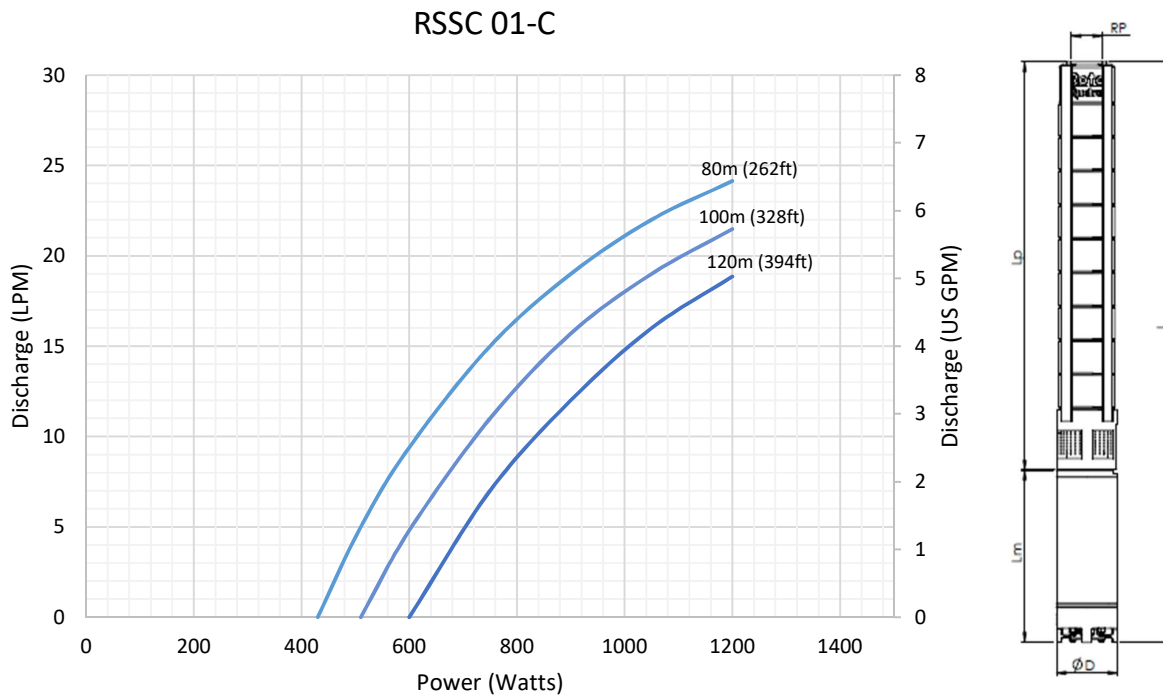
MODEL: RSSC 01 - C

1200 WATT, 50V Motor, 4x4

SYSTEM CODE: 12K023NAC1C60L

DUTY HEAD (METER): 100 m

DC Solar	INPUT POWER (WATTS)						
	1200	1050	900	750	600	510	430
HEAD (M)	FLOW (LPM)						
120	19	16	12	7	0		
100	21	19	16	11	5	0	
80	24	22	19	15	9	5	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12K023NAC1C60X	15	32	532 + 257	CSRUPWCC100	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

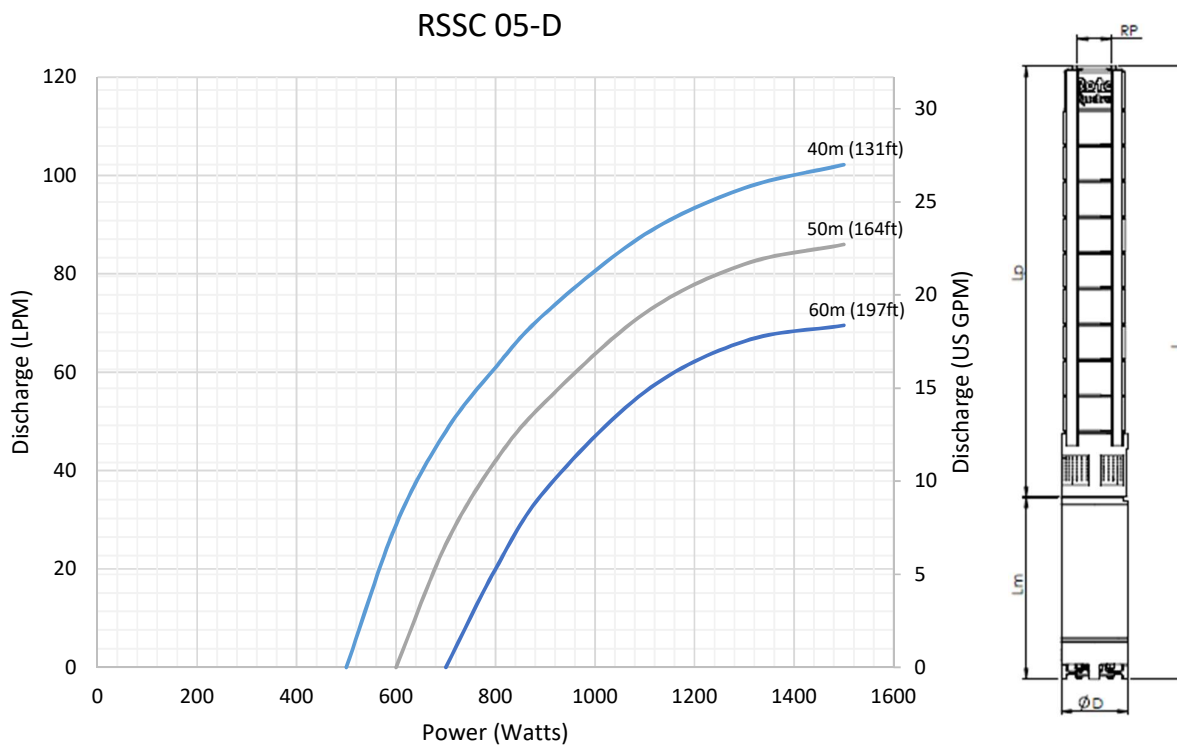
MODEL: RSSC 05 - D

1500 WATT, 70V Motor, 4x4

SYSTEM CODE: 12E012PAD1C60L

DUTY HEAD (METER): 50 m

DC Solar	INPUT POWER (WATTS)							
	1500	1300	1100	900	800	700	600	500
HEAD (M)	FLOW (LPM)							
60	70	66	56	36	20	0		
50	86	82	72	54	42	25	0	
40	102	97	88	72	61	48	29	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12E012PAD1C60X	14	40	406 + 257	DSRUPWDC050	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

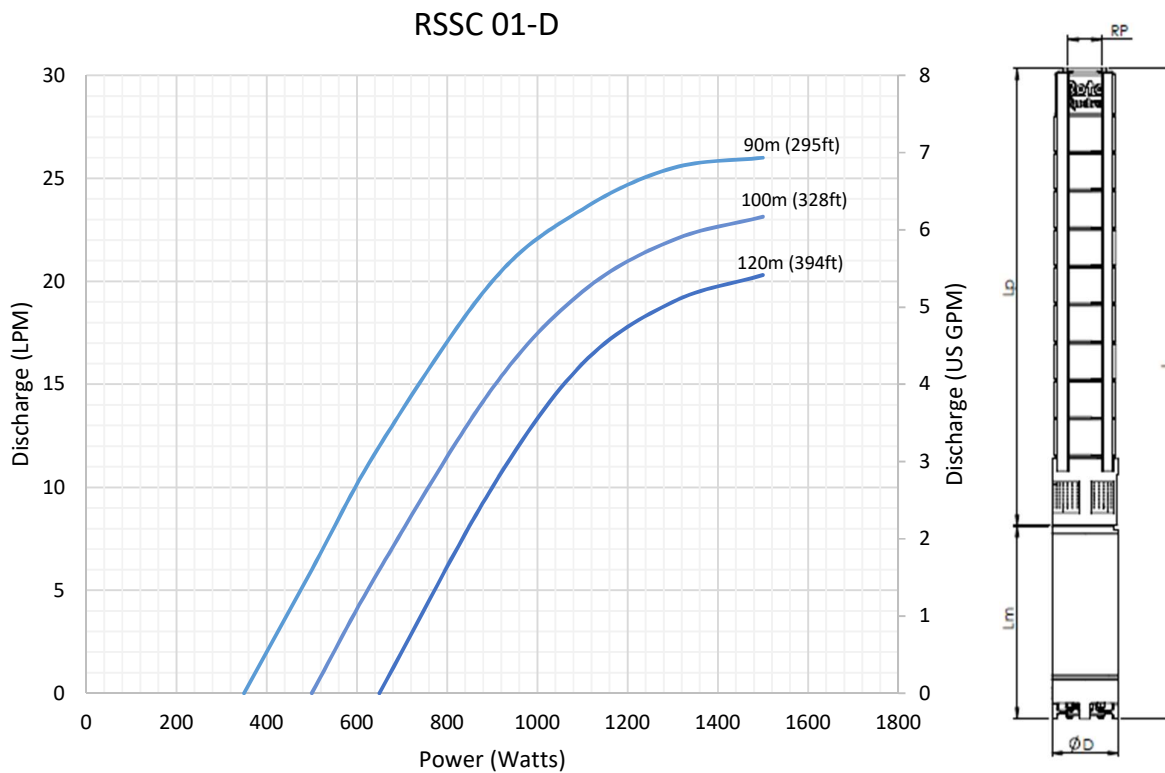
MODEL: RSSC 01 - D

1500 WATT, 70V Motor, 4x4

SYSTEM CODE: 12K023NAD1C60L

DUTY HEAD (METER): 100 m

DC Solar	INPUT POWER (WATTS)						
	1500	1300	1100	900	650	500	350
HEAD (M)	FLOW (LPM)						
120	20	19	16	10	0		
100	23	22	20	15	6	0	
80	26	26	24	20	12	6	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12K023NAD1C60X	19	32	668 + 257	DSRUPWDC100	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

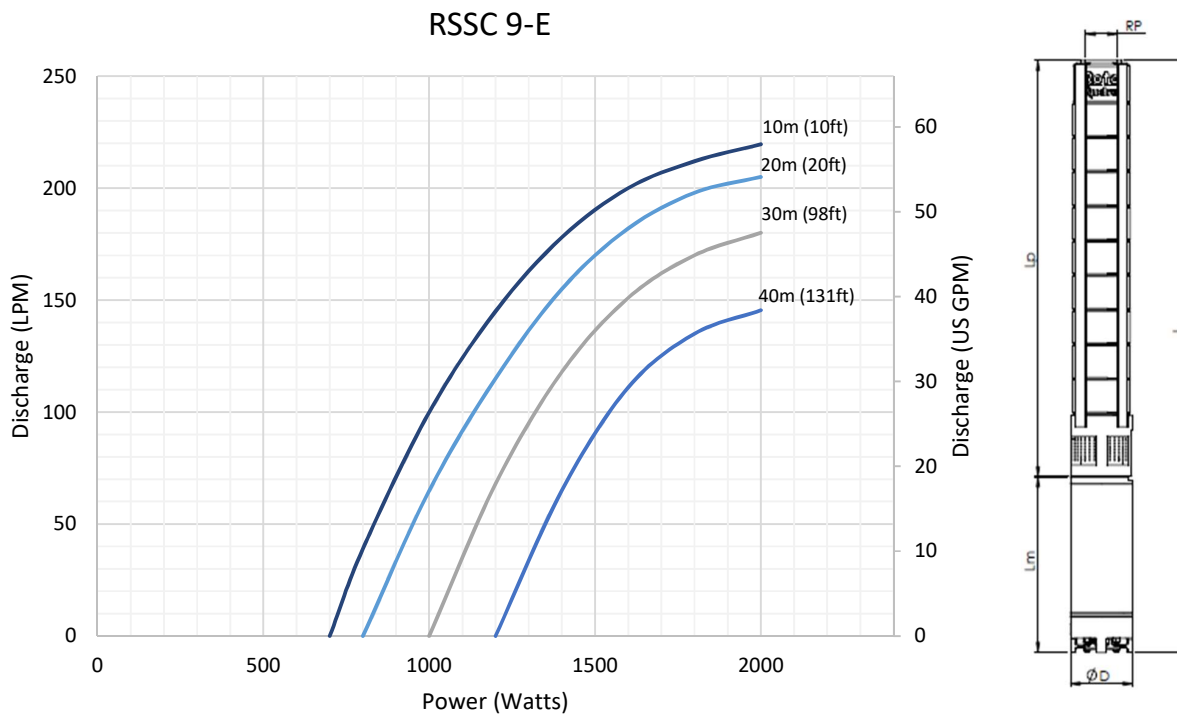
MODEL: RSSC 09 - E

2000 WATT, 100V Motor, 4x4

SYSTEM CODE: 12C009QAE1D60L

DUTY HEAD (METER): 30 m

DC Solar	INPUT POWER (WATTS)							
	2000	1800	1600	1400	1200	1000	800	700
HEAD (M)	FLOW (LPM)							
40	145	135	111	65	0			
30	180	170	151	118	68	0		
20	205	198	182	155	115	65	0	
10	220	212	200	178	145	100	39	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12C009QAE1D60X	28	50	802 + 302	ESRUPWDC030	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

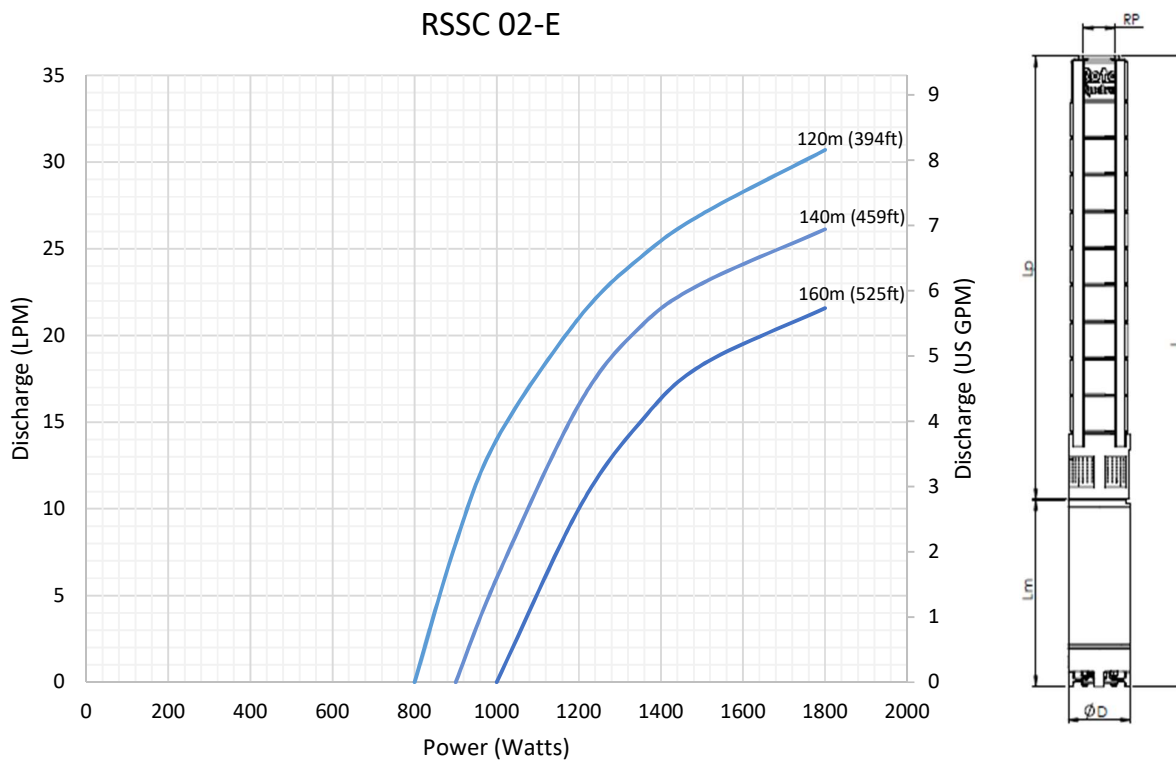
MODEL: RSSC 02 - E

1800 WATT, 100V Motor, 4x4

SYSTEM CODE: 12L033NAE1D60L

DUTY HEAD (METER): 140 m

DC Solar	INPUT POWER (WATTS)						
	1800	1500	1350	1200	1000	900	800
HEAD (M)	FLOW (LPM)						
160	22	18	15	10	0		
140	26	23	21	16	6	0	
120	31	27	25	21	14	8	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12L033NAE1D60X	25	32	878 + 257	ESRUPWDC120	10	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

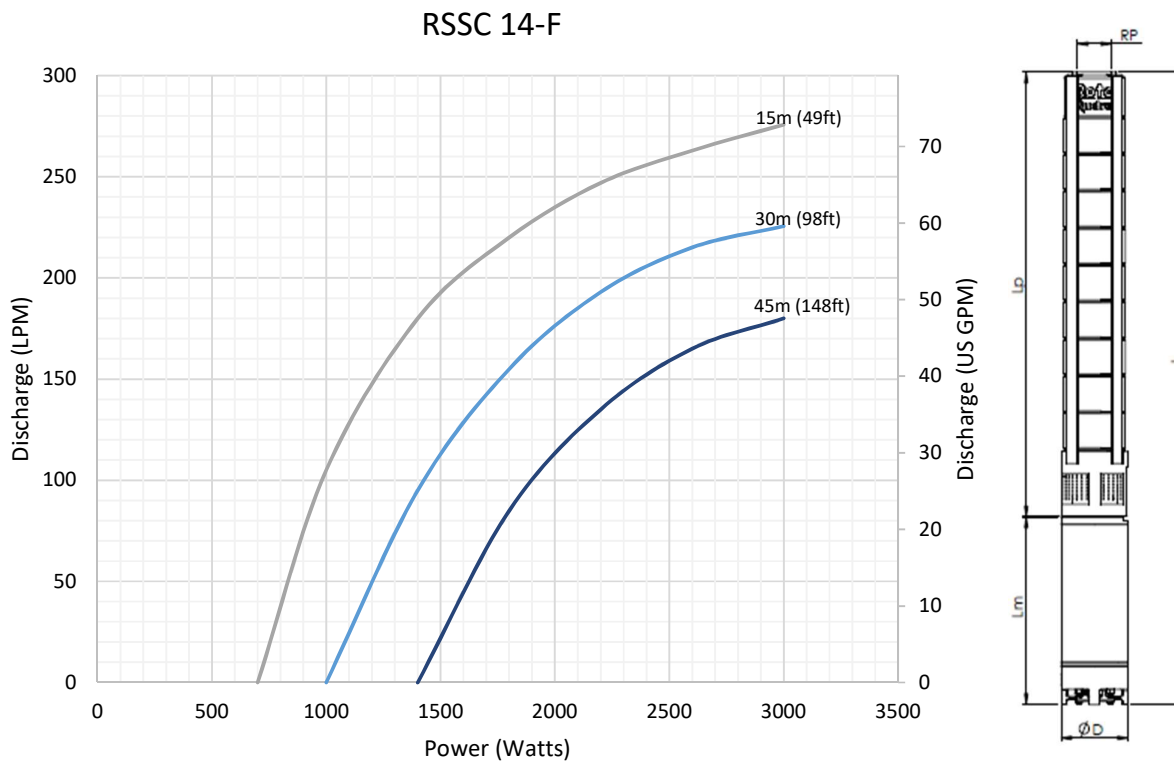
MODEL: RSSC 14 - F

3000 WATT, 150V Motor, 4x6

SYSTEM CODE: 13C005RAF1G60L

DUTY HEAD (METER): 30 m

DC Solar	INPUT POWER (WATTS)						
	3000	2600	2200	1800	1400	1000	700
HEAD (M)	FLOW (LPM)						
45	180	165	135	85	0		
30	226	215	193	155	95	0	
15	276	263	247	220	180	105	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13C005RAF1G60X	24	64	556 + 347	FSRUPWGC030	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

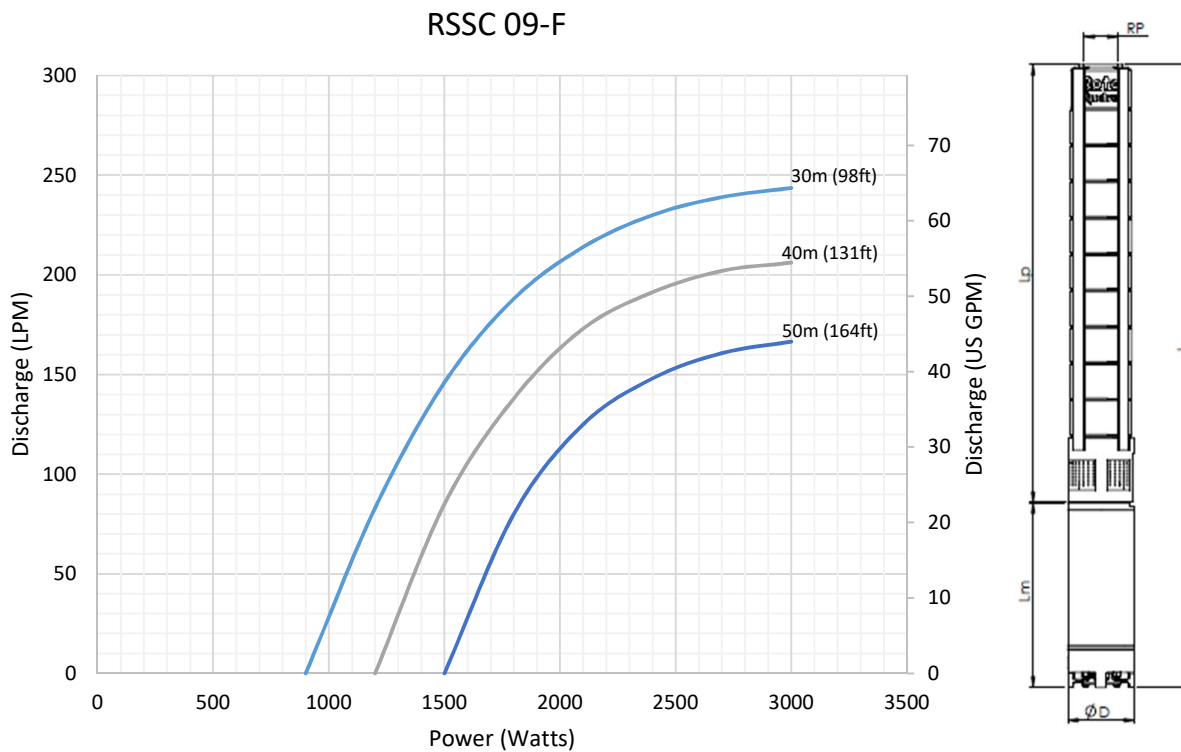
MODEL: RSSC 09 - F

3000 WATT, 150V Motor, 4x4

SYSTEM CODE: 12E012QAF1G60L

DUTY HEAD (METER): 40 m

DC Solar	INPUT POWER (WATTS)							
	3000	2700	2400	2100	1800	1500	1200	900
HEAD (M)	FLOW (LPM)							
50	166	161	148	125	80	0		
40	206	202	191	173	138	85	0	
30	244	239	230	214	188	146	83	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12E012QAF1G60X	34	50	1000 + 347	FSRUPWGC050	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

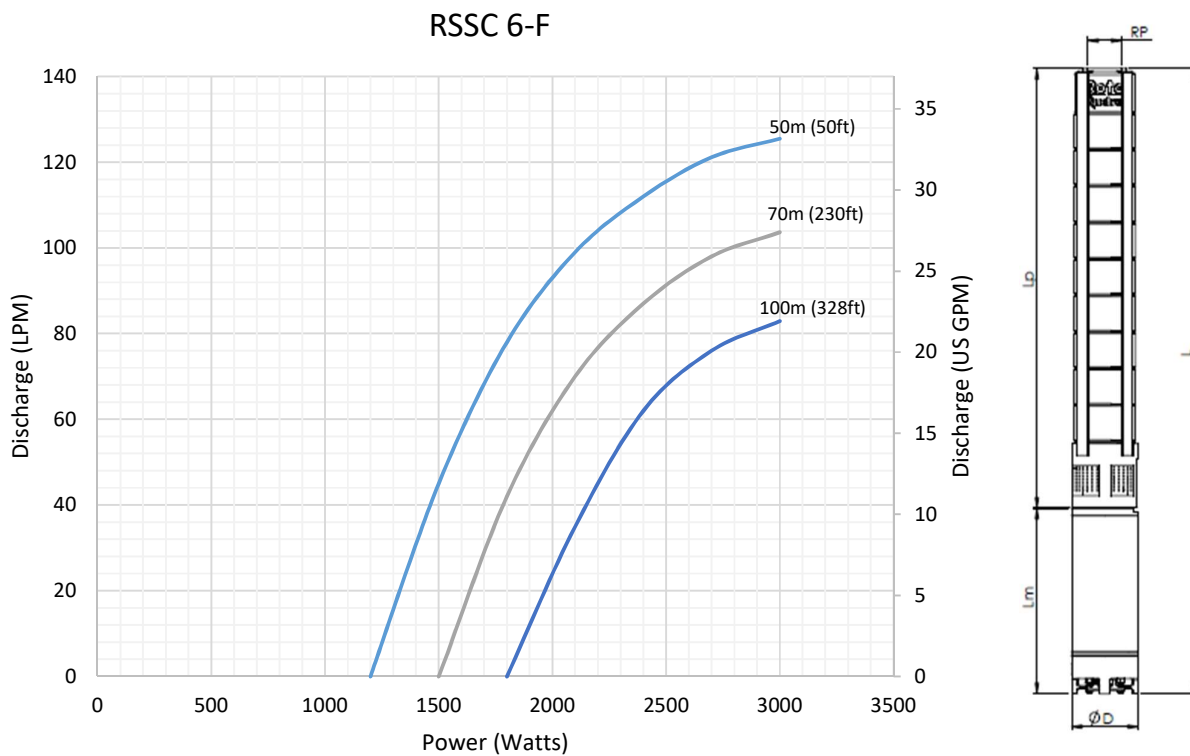
MODEL: RSSC 06 - F

3000 WATT, 150V Motor, 4x4

SYSTEM CODE: 12G018PAF1G60L

DUTY HEAD (METER): 70 m

DC Solar	INPUT POWER (WATTS)						
	3000	2700	2400	2100	1800	1500	1200
HEAD (M)	FLOW (LPM)						
100	83	76	62	35	0		
70	104	98	87	70	42	0	
50	125	121	112	99	78	45	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12G018PAF1G60X	25	50	956 + 347	FSRUPWGC070	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

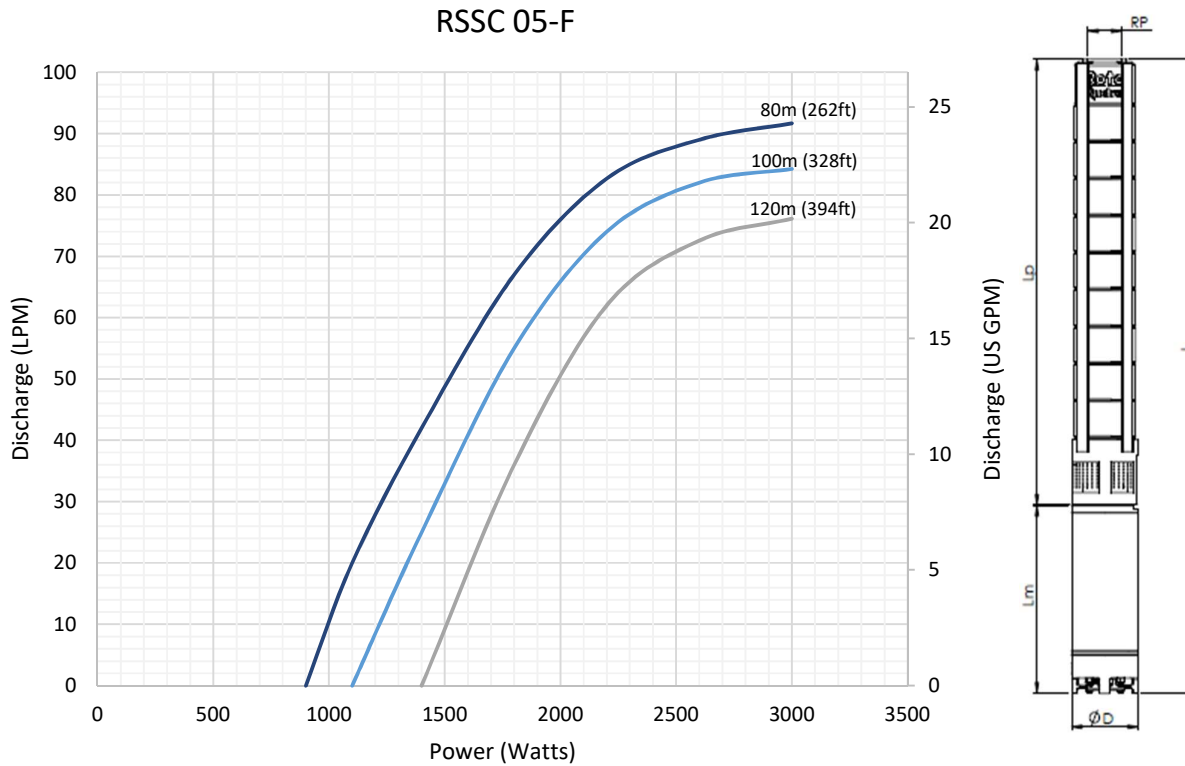
MODEL: RSSC 05 - F

3000 WATT, 150V Motor, 4x4

SYSTEM CODE: 12K025PAF1G60L

DUTY HEAD (METER): 100 m

DC Solar	INPUT POWER (WATTS)						
	3000	2600	2200	1800	1400	1100	900
HEAD (M)	FLOW (LPM)						
120	76	73	62	36	0		
100	84	82	74	55	25	0	
80	92	89	83	67	42	20	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12K025PAF1G60X	23	50	710 + 347	FSRUPWGC100	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

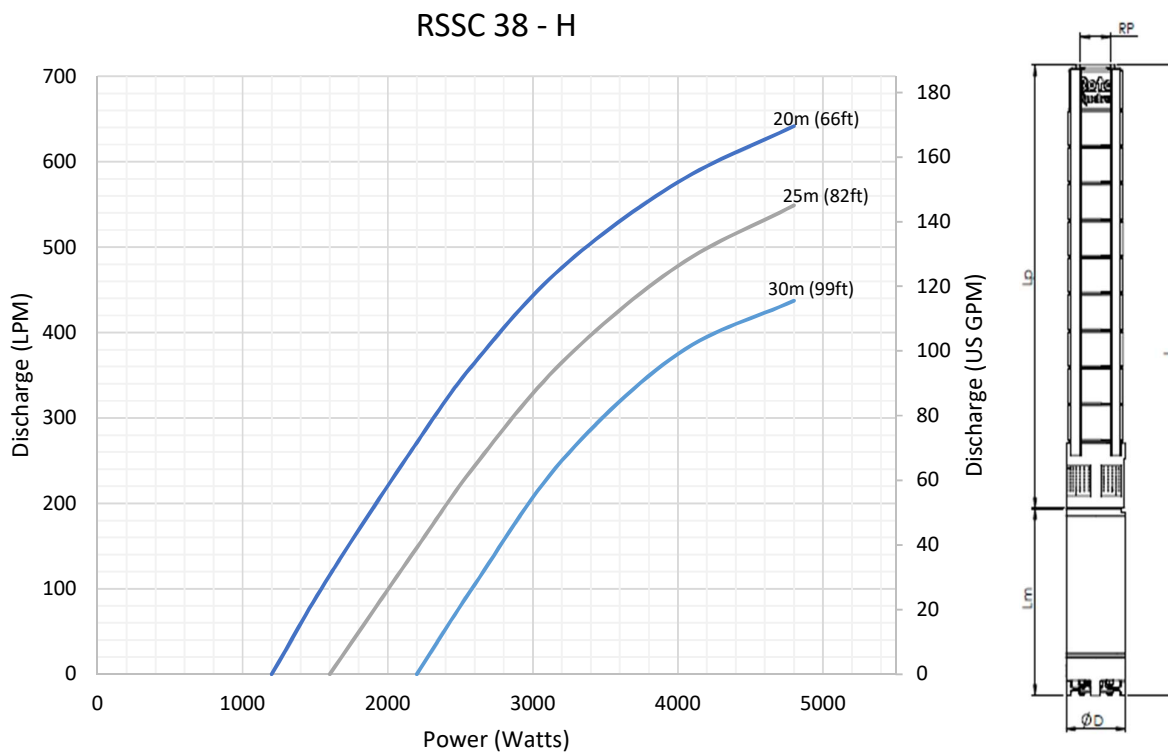
MODEL: RSSC 38 - H

4800 WATT, 230V Motor, 4x6

SYSTEM CODE: 13B03CTAH1K60L

DUTY HEAD (METER): 25 m

DC Solar	INPUT POWER (WATTS)						
	4800	4000	3200	2600	2200	1600	1200
HEAD (M)	FLOW (LPM)						
30	437	375	250	105	0		
25	549	478	365	244	148	0	
20	642	576	476	365	271	116	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13B03CTAH1K60X	28	100	596 + 494	HSRUPWKC020	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

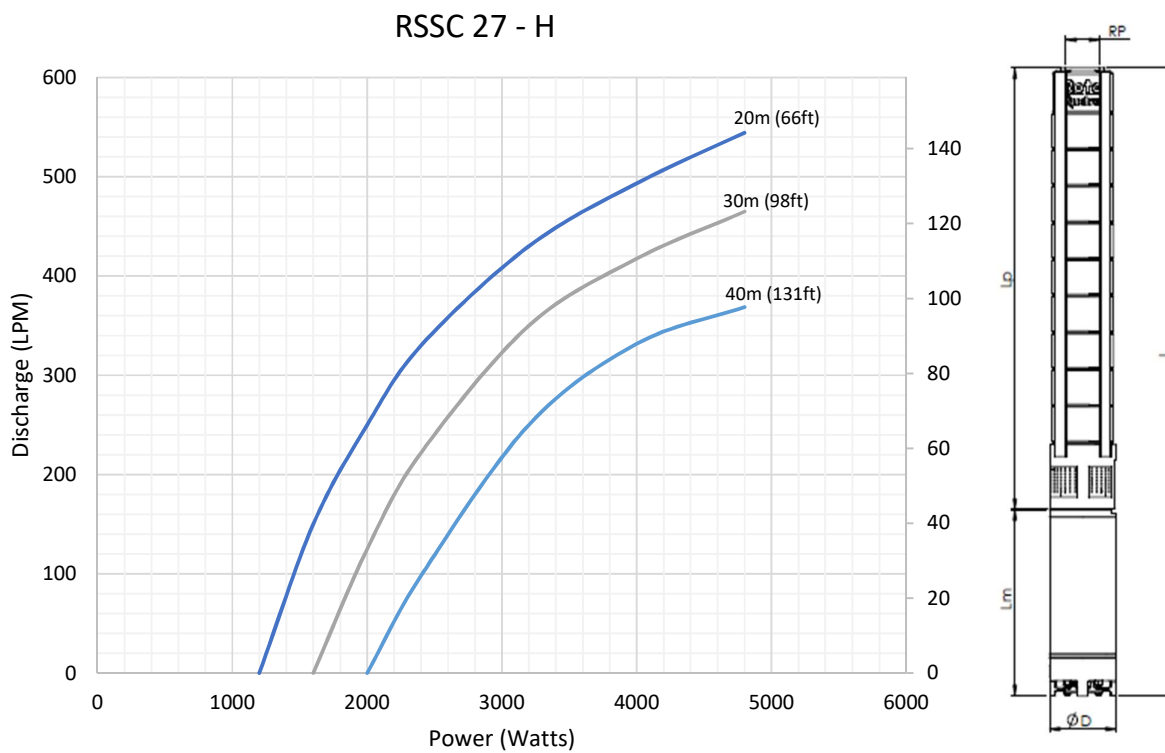
MODEL: RSSC 27 - H

4800 WATT, 230V Motor, 4x6

SYSTEM CODE: 13C005SAH1K60L

DUTY HEAD (METER): 30 m

DC Solar	INPUT POWER (WATTS)						
	4800	4000	3200	2400	2000	1600	1200
HEAD (M)	FLOW (LPM)						
40	369	332	250	98	0		
30	465	417	350	222	125	0	
20	544	493	430	330	250	150	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13C005SAH1K60X	33	80	733 + 494	HSRUPWKC030	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

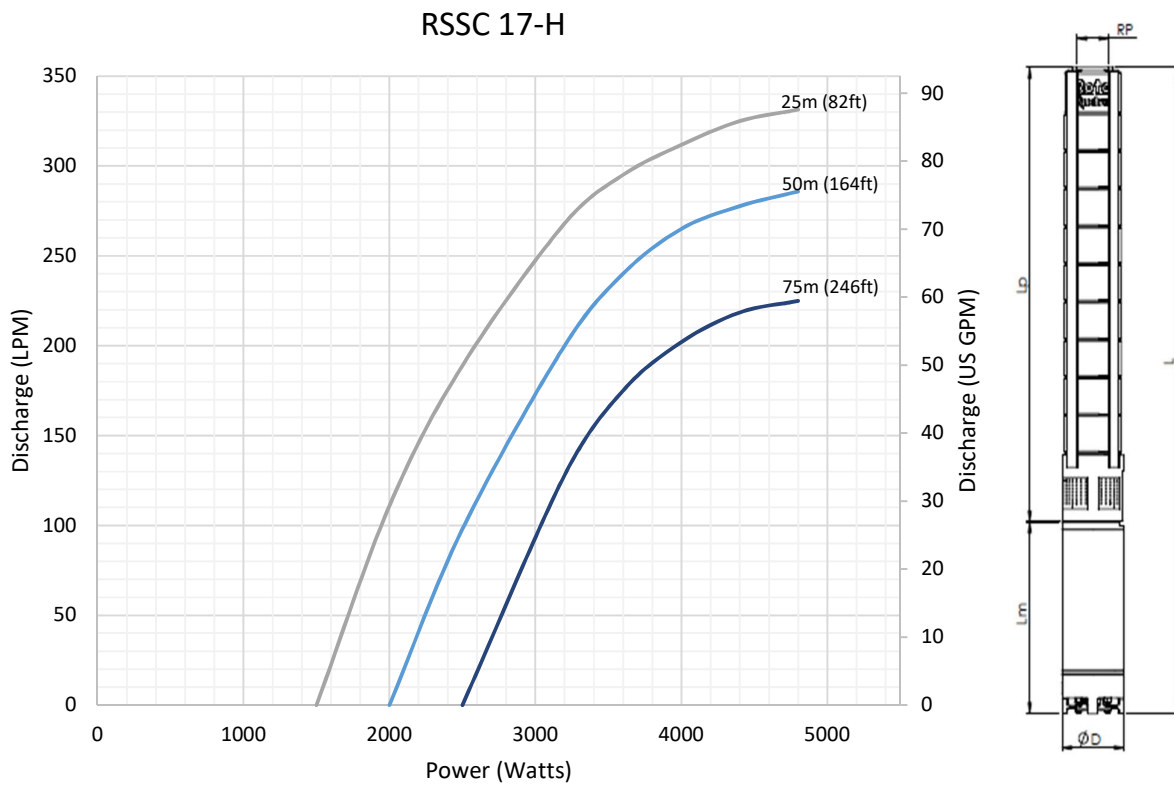
MODEL: RSSC 17 - H

4800 WATT, 230V Motor, 4x6

SYSTEM CODE: 13E008RAH1K60L

DUTY HEAD (METER): 50 m

DC Solar	INPUT POWER (WATTS)							
	4800	4400	4000	3600	3200	2500	2000	1500
HEAD (M)	FLOW (LPM)							
75	225	218	202	175	128	0		
50	286	278	265	240	200	98	0	
25	331	325	312	295	268	189	111	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13E008RAH1K60X	33	64	737 + 494	HSRUPWKC050	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

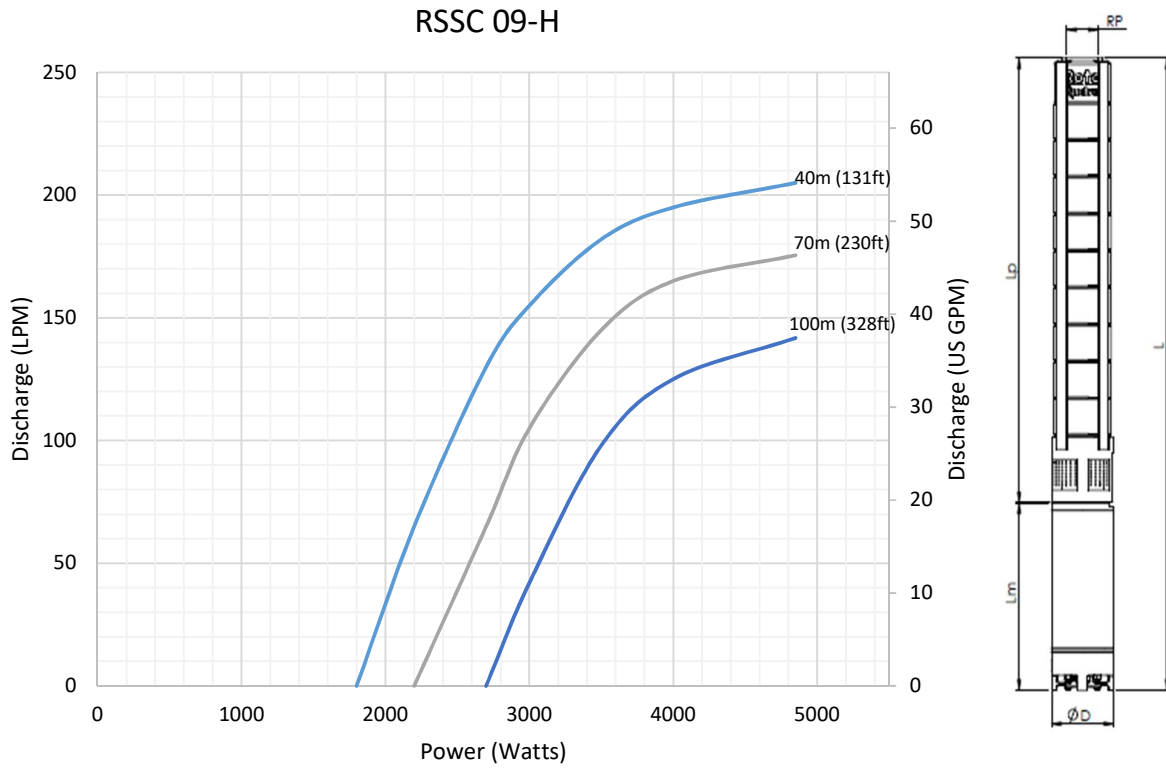
MODEL: RSSC 09 - H

4850 WATT, 230V Motor, 4x4

SYSTEM CODE: 12G022QAH1K60L

DUTY HEAD (METER): 70 m

DC Solar	INPUT POWER (WATTS)						
	4850	4000	3500	3000	2700	2200	1800
HEAD (M)	FLOW (LPM)						
100	142	125	98	42	0		
70	176	165	145	105	65	0	
40	205	195	182	155	130	65	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12G022QAH1K60X	51	50	1605 + 494	HSRUPWKC070	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

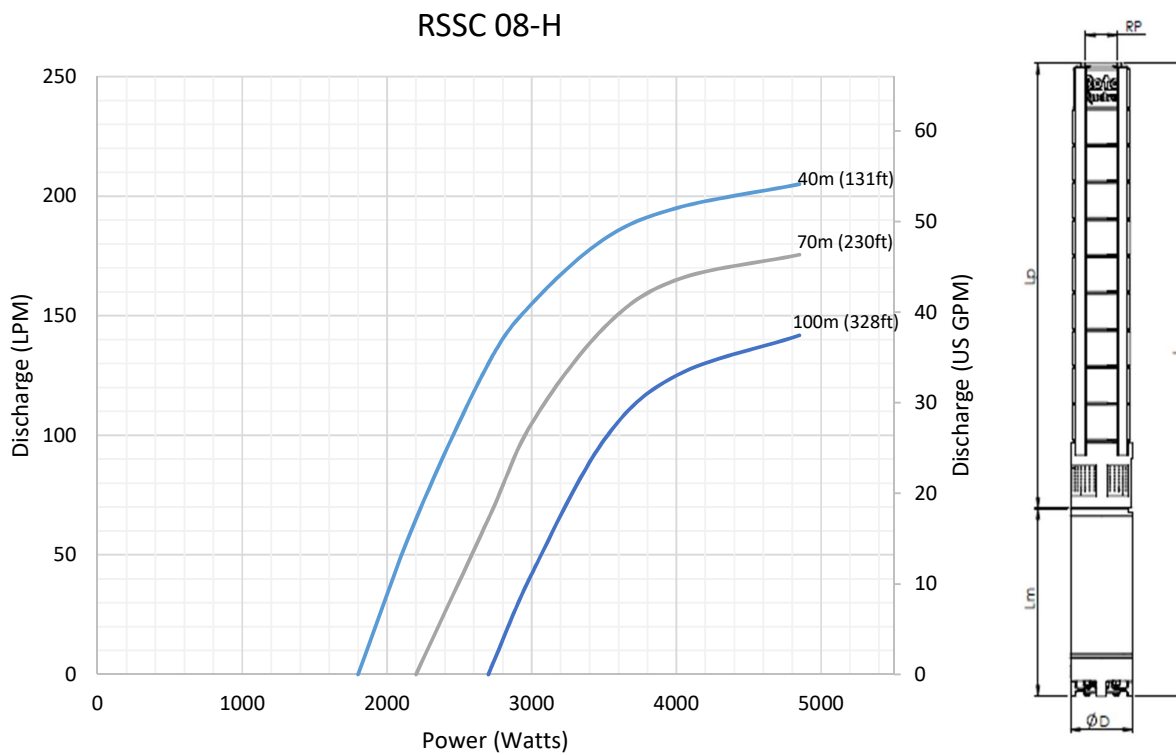
MODEL: RSSC 08 - H

4850 WATT, 230V Motor, 4x4

SYSTEM CODE: 12K022QAH1K60L

DUTY HEAD (METER): 100 m

DC Solar	INPUT POWER (WATTS)						
	4850	4000	3500	3000	2700	2200	1800
HEAD (M)	FLOW (LPM)						
100	142	125	98	42	0		
70	176	165	145	105	65	0	
40	205	195	182	155	130	65	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12K022QAH1K60X	51	80	1605 + 494	HSRUPWKC100	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

MODEL: RSSC 05 - H

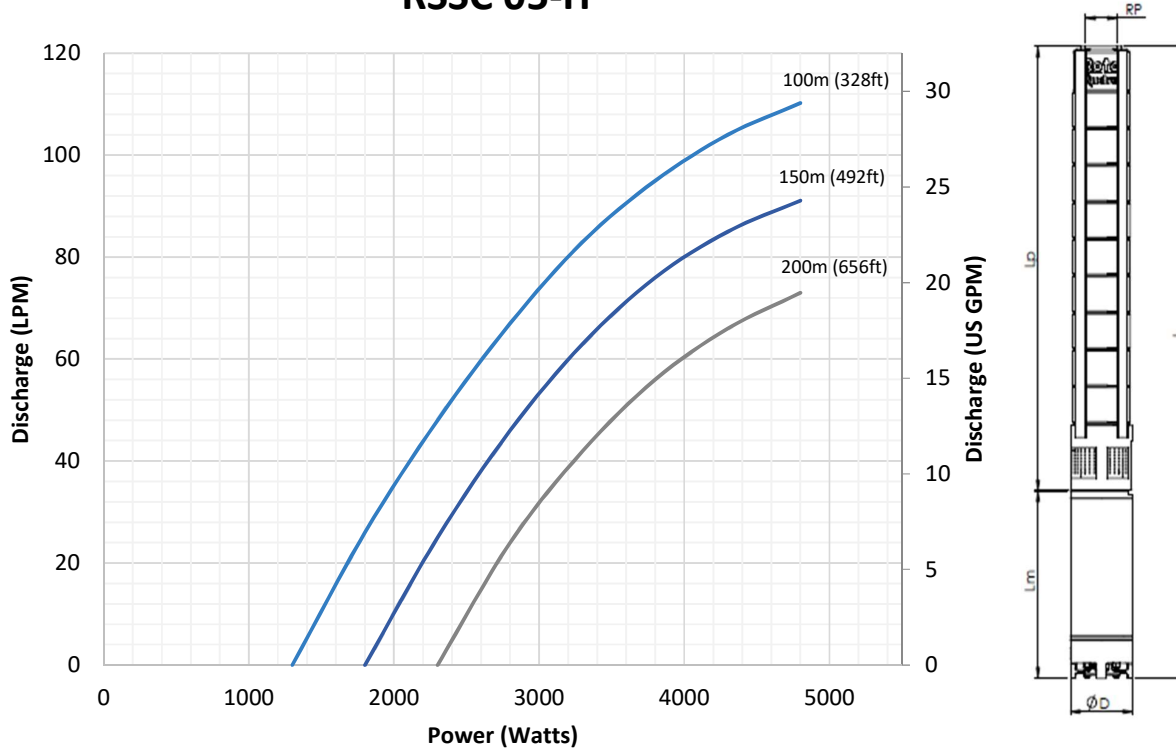
4800 WATT, 230V Motor, 4x4

SYSTEM CODE: 12N044PAH1K60L

DUTY HEAD (METER): 150 m

DC Solar	INPUT POWER (WATTS)							
	4800	4300	3800	3300	2800	2300	1800	1300
HEAD (M)	FLOW (LPM)							
200	73	66	56	42	24	0		
150	91	85	76	63	46	25	0	
100	110	104	95	83	67	48	26	0

RSSC 05-H



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12N044PAH1K60X	33	40	1344 + 494	HSRUPWKC150	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

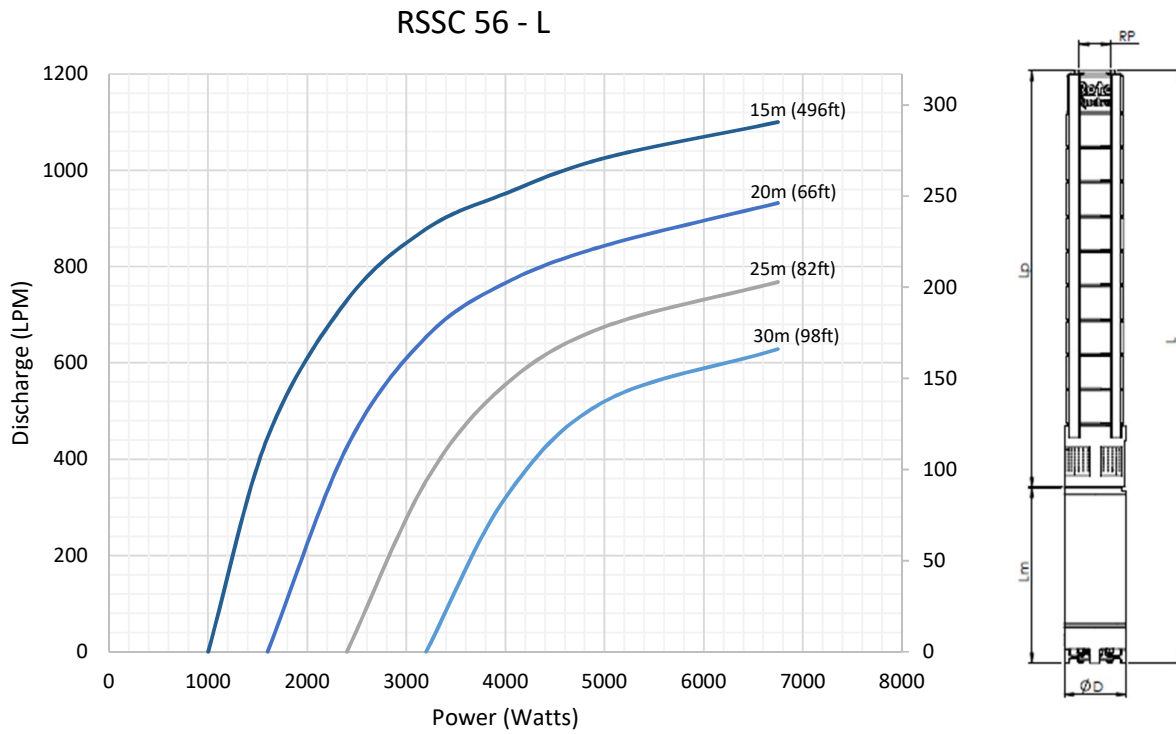
MODEL: RSSC 56 - L

6750 WATT, 350V Motor, 6x6

SYSTEM CODE: 13B003TAL1N60L

DUTY HEAD (METER): 25 m

DC Solar	INPUT POWER (WATTS)						
	6750	5000	4000	3200	2400	1600	1000
HEAD (M)	FLOW (LPM)						
30	628	520	320	0			
25	768	675	555	355	0		
20	932	843	766	654	425	0	
15	1100	1025	952	878	730	445	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13B003TAL1N60X	38	100	596 + 512	LSRUPWNC020	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

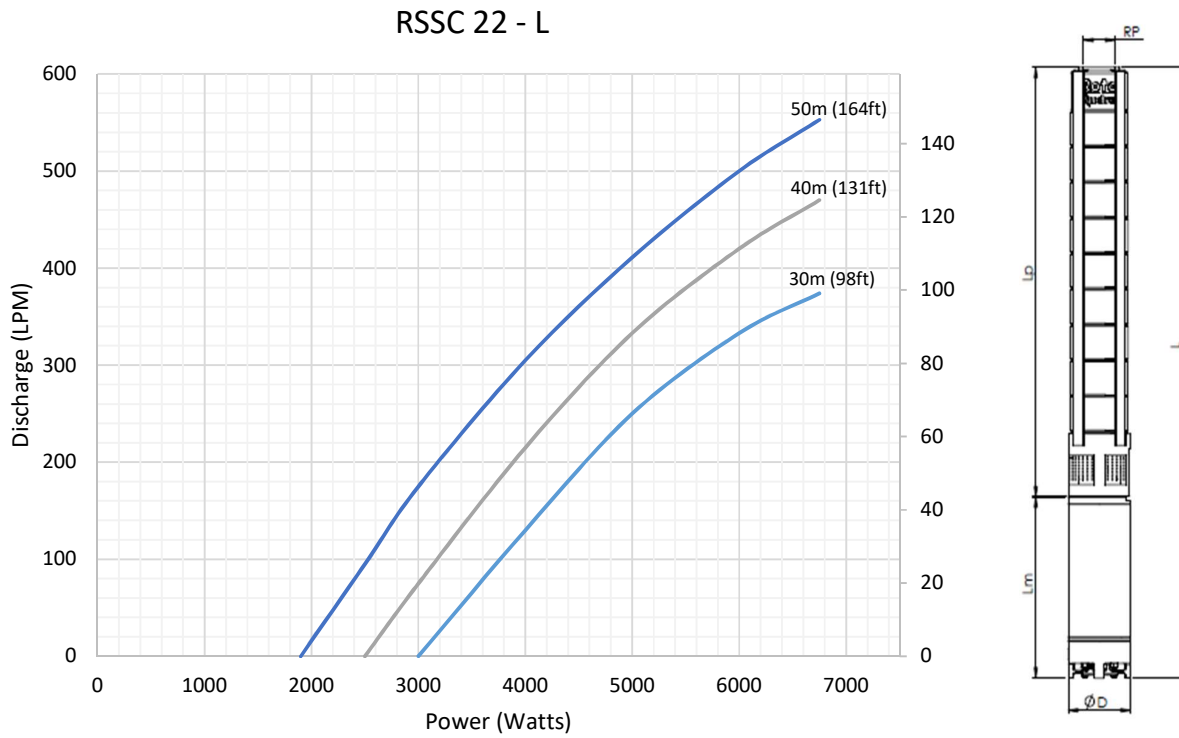
MODEL: RSSC 22 - L

6750 WATT, 350V Motor, 6x6

SYSTEM CODE: 13E006SAL1N60L

DUTY HEAD (METER): 40 m

DC Solar	INPUT POWER (WATTS)						
	6750	6000	5000	4000	3000	2500	1900
HEAD (M)	FLOW (LPM)						
50	374	333	250	130	0		
40	470	420	333	215	75	0	
30	553	500	411	305	175	95	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13E006SAL1N60X	46	80	829 + 512	LSRUPWNC050	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

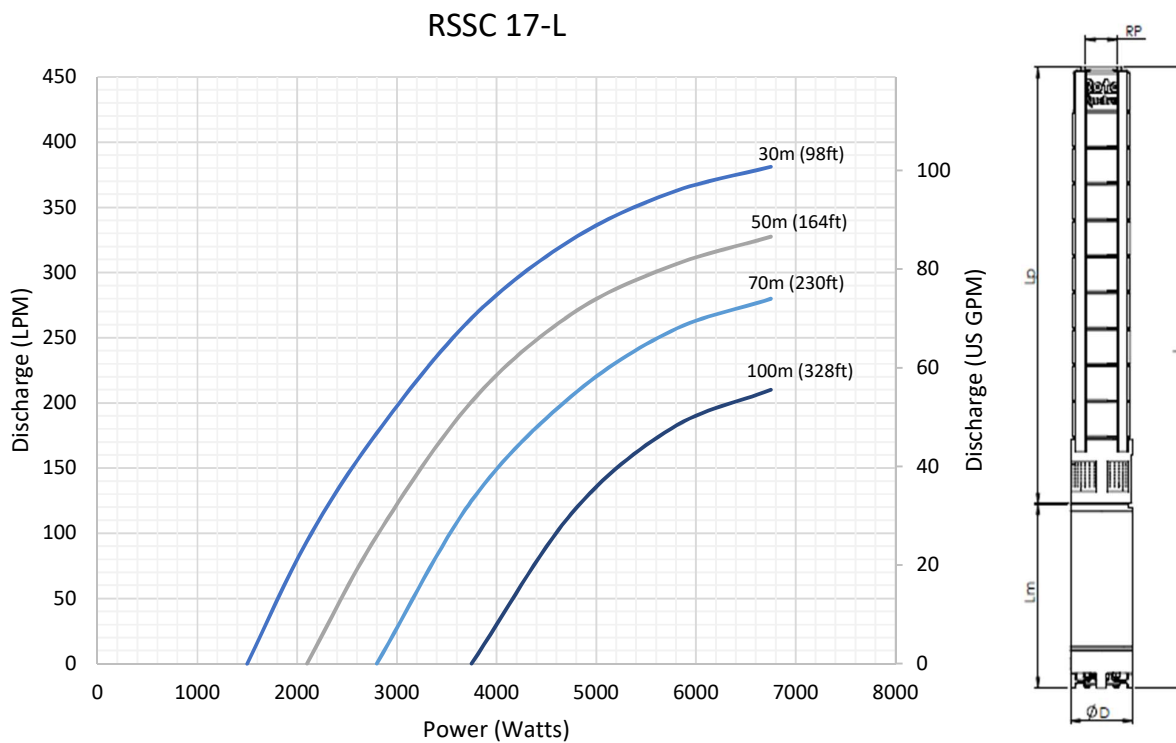
MODEL: RSSC 17 - L

6750 WATT, 350V Motor, 6x6

SYSTEM CODE: 13G010RAL1N60L

DUTY HEAD (METER): 70 m

DC Solar	INPUT POWER (WATTS)						
	6750	5750	4750	3750	2800	2100	1500
HEAD (M)	FLOW (LPM)						
100	210	180	115	0			
70	280	255	205	125	0		
50	327	305	268	201	98	0	
30	381	361	325	265	177	94	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13G010RAL1N60X	46	64	858 + 512	LSRUPWNC070	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

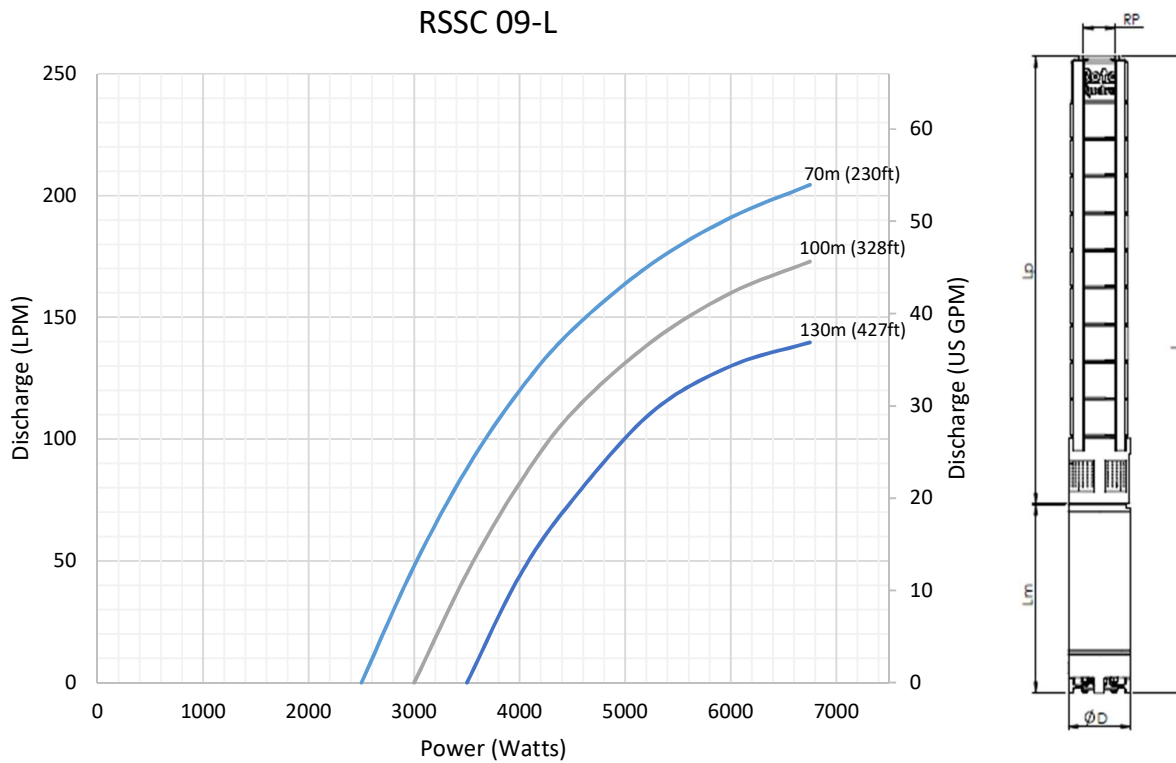
MODEL: RSSC 09 - L

6750 WATT, 350V Motor, 6x4

SYSTEM CODE: 12K032QAL1N60L

DUTY HEAD (METER): 100 m

DC Solar	INPUT POWER (WATTS)							
	6750	6000	5250	4500	4000	3500	3000	2500
HEAD (M)	FLOW (LPM)							
130	140	130	111	75	44	0		
100	173	160	140	111	82	45	0	
70	204	191	172	145	120	88	48	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12K032QAL1N60X	75	50	2210 + 512	LSRUPWNC100	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

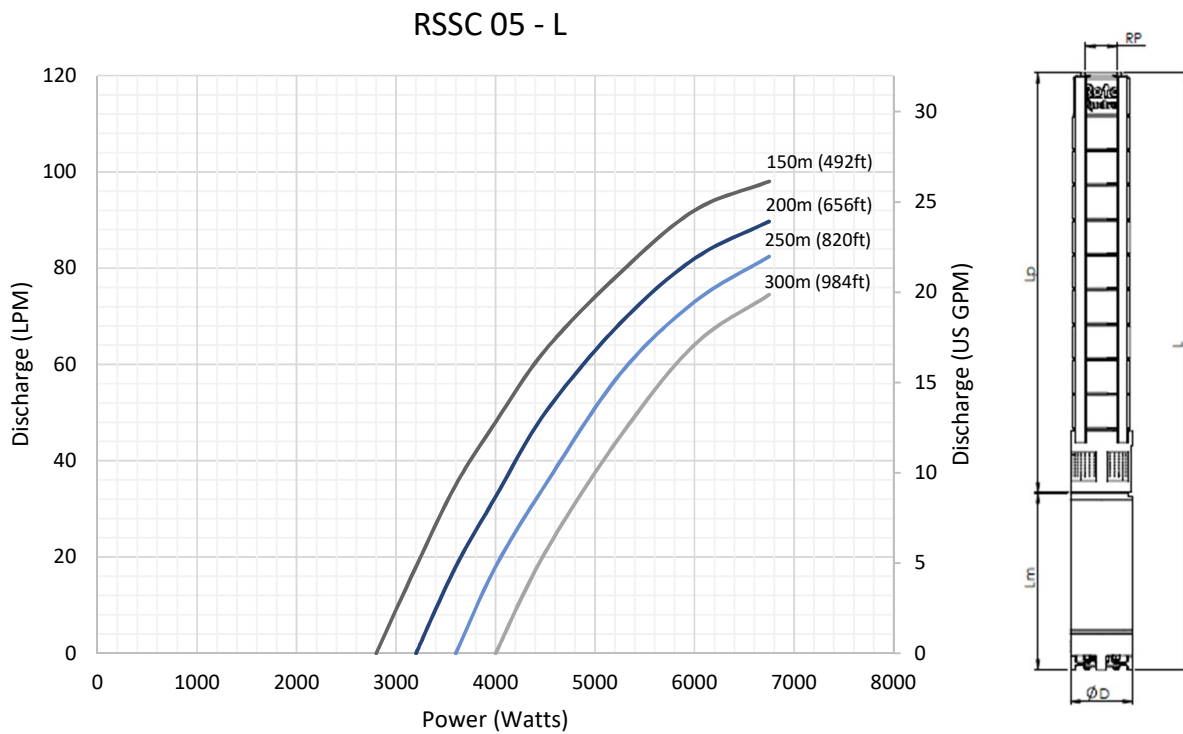
MODEL: RSSC 05 - L

6750 WATT, 350V Motor, 6x4

SYSTEM CODE: 12N060PAL1N60L

DUTY HEAD (METER): 200 m

DC Solar	INPUT POWER (WATTS)							
	6750	6000	5250	4500	4000	3600	3200	2800
HEAD (M)	FLOW (LPM)							
300	74	64	45	21	0			
250	82	73	58	35	18	0		
200	90	82	69	50	33	18	0	
150	98	92	79	63	48	35	18	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12N060PAL1N60X	55	40	1820 + 512	LSRUPWNC150	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

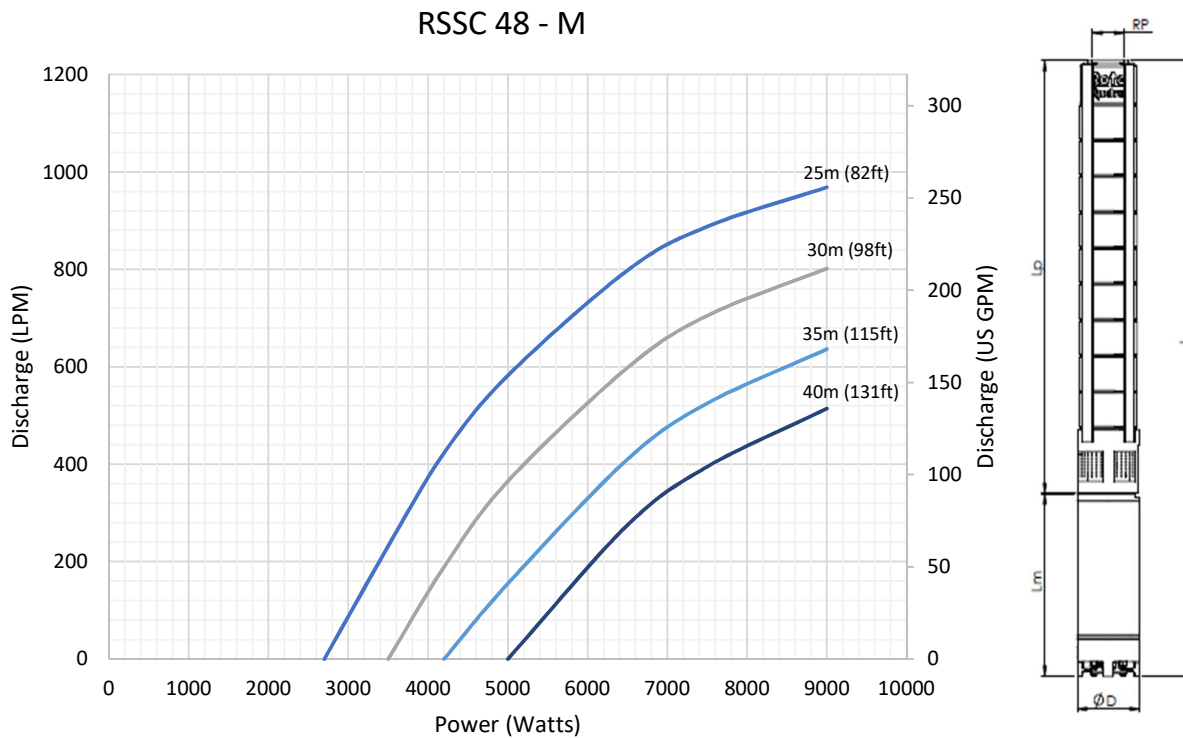
MODEL: RSSC 48 - M

9000 WATT, 380V Motor, 6x6

SYSTEM CODE: 13C040TAM1P60L

DUTY HEAD (METER): 35 m

DC Solar	INPUT POWER (WATTS)						
	9000	7500	6500	5000	4200	3500	2700
HEAD (M)	FLOW (LPM)						
40	514	395	275	0			
35	636	525	410	155	0		
30	802	705	598	365	189	0	
25	969	888	798	582	423	232	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13C040TAM1P60X	44	100	709 + 540	MSRUPWPC030	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

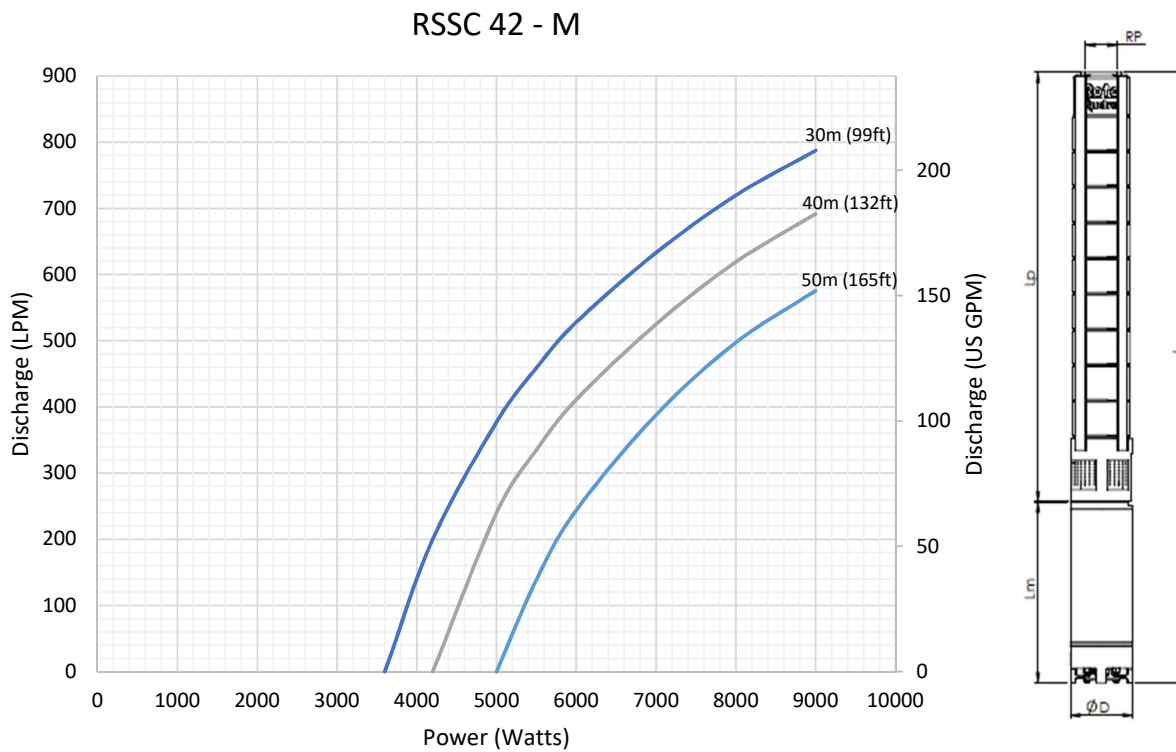
MODEL: RSSC 42 - M

9000 WATT, 380V Motor, 6x6

SYSTEM CODE: 13D050SAM1P60L

DUTY HEAD (METER): 40 m

DC Solar	INPUT POWER (WATTS)							
	9000	8000	7000	6000	5500	5000	4200	3600
HEAD (M)	FLOW (LPM)							
50	576	497	388	244	139	0		
40	692	619	525	411	335	240	0	
30	787	720	633	528	459	377	200	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13D050SAM1P60X	48	100	838 + 540	MSRUPWPC040	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

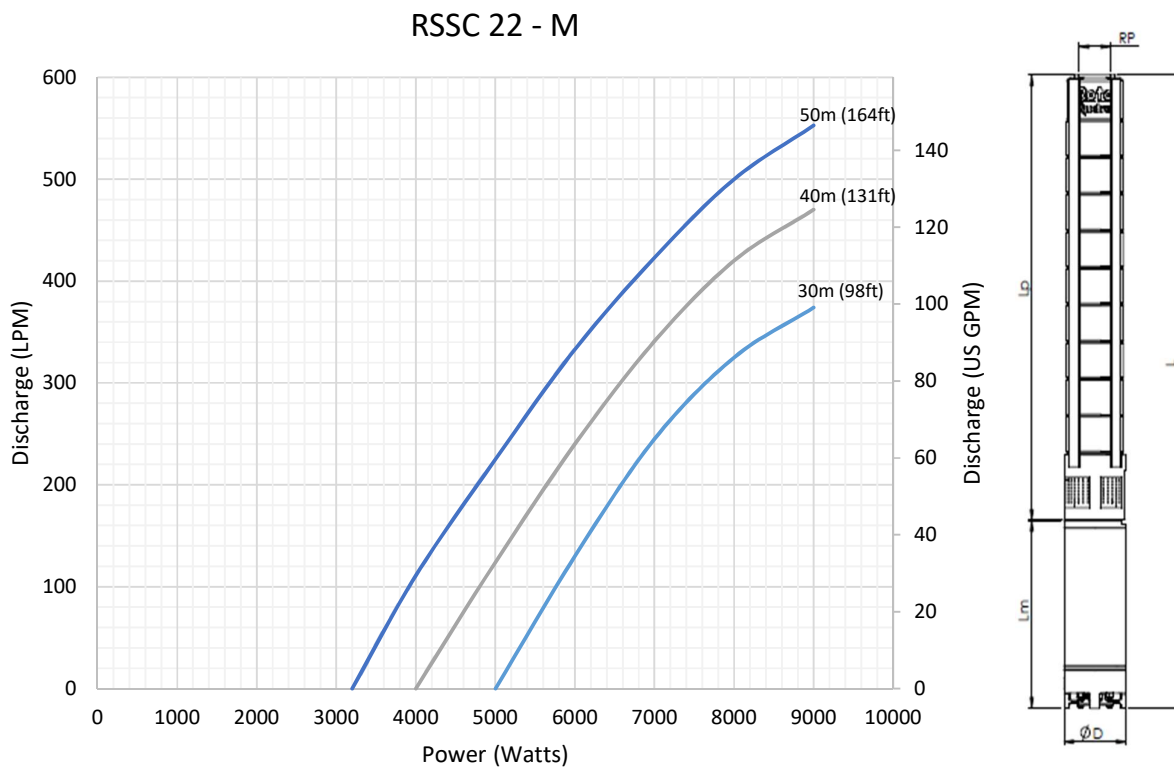
MODEL: RSSC 22 - M

9000 WATT, 380V Motor, 6x6

SYSTEM CODE: 13E080SAM1P60L

DUTY HEAD (METER): 40 m

DC Solar	INPUT POWER (WATTS)						
	9000	8000	7000	6000	5000	4000	3200
HEAD (M)	FLOW (LPM)						
50	374	325	245	130	0		
40	470	420	341	240	124	0	
30	553	500	423	333	225	111	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13E080SAM1P60X	54	80	1021 + 540	MSRUPWPC050	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

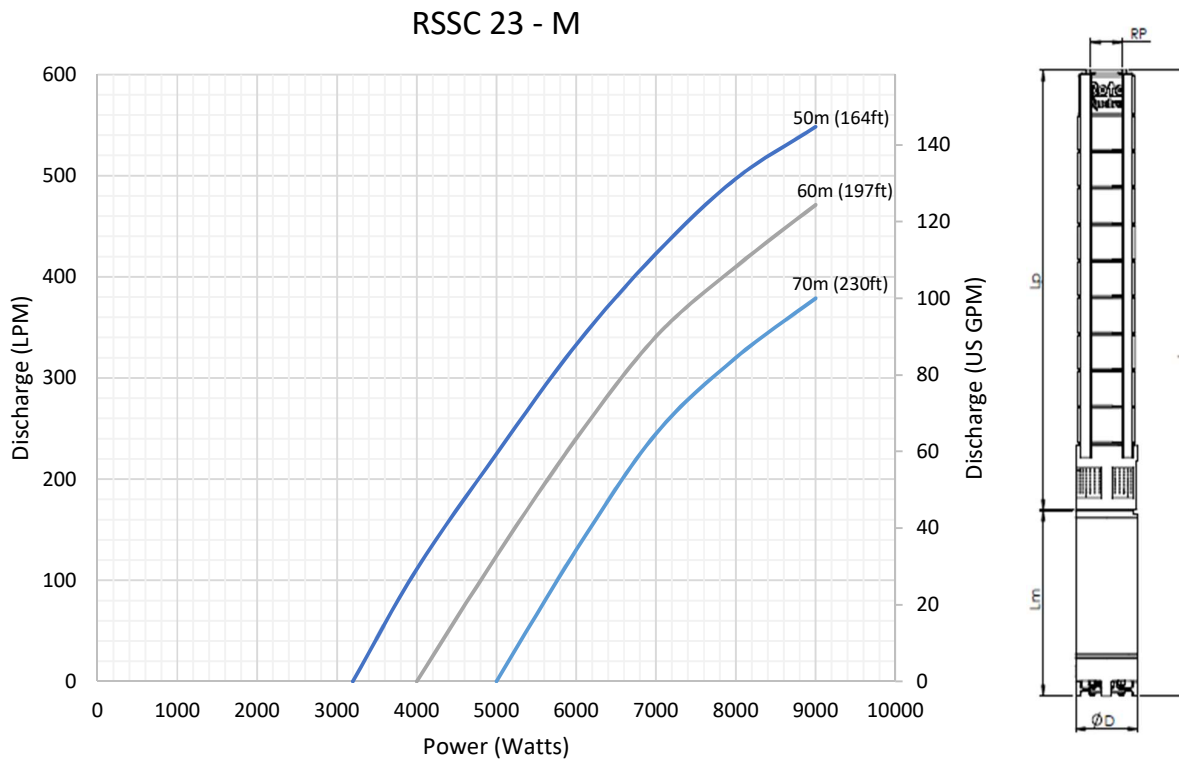
MODEL: RSSC 23 - M

9000 WATT, 380V Motor, 6x6

SYSTEM CODE: 13G090SAM1P60L

DUTY HEAD (METER): 60 m

DC Solar	INPUT POWER (WATTS)						
	9000	8000	7000	6000	5000	4000	3200
HEAD (M)	FLOW (LPM)						
70	379	320	245	130	0		
60	471	410	341	240	124	0	
50	548	497	423	333	225	111	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13G090SAM1P60X	56	80	1133 + 540	MSRUPWPC070	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

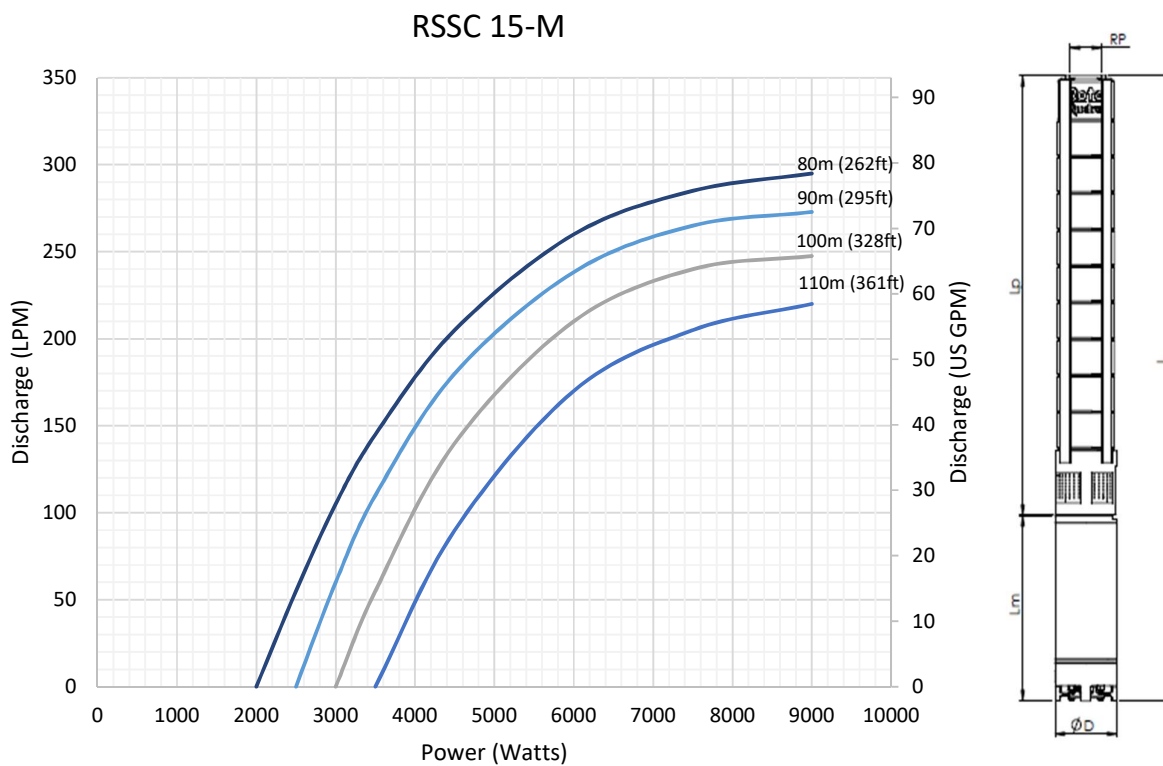
MODEL: RSSC 15 - M

9000 WATT, 380V Motor, 6x6

SYSTEM CODE: 13K014RAM1P60L

DUTY HEAD (METER): 100 m

DC Solar	INPUT POWER (WATTS)							
	9000	7500	6000	4500	3500	3000	2500	2000
HEAD (M)	FLOW (LPM)							
110	220	205	170	90	0			
100	248	240	210	140	55	0		
90	273	265	238	180	110	60	0	
80	295	285	260	205	145	105	55	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
13K014RAM1P60X	55	64	1116 + 540	MSRUPWPC100	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

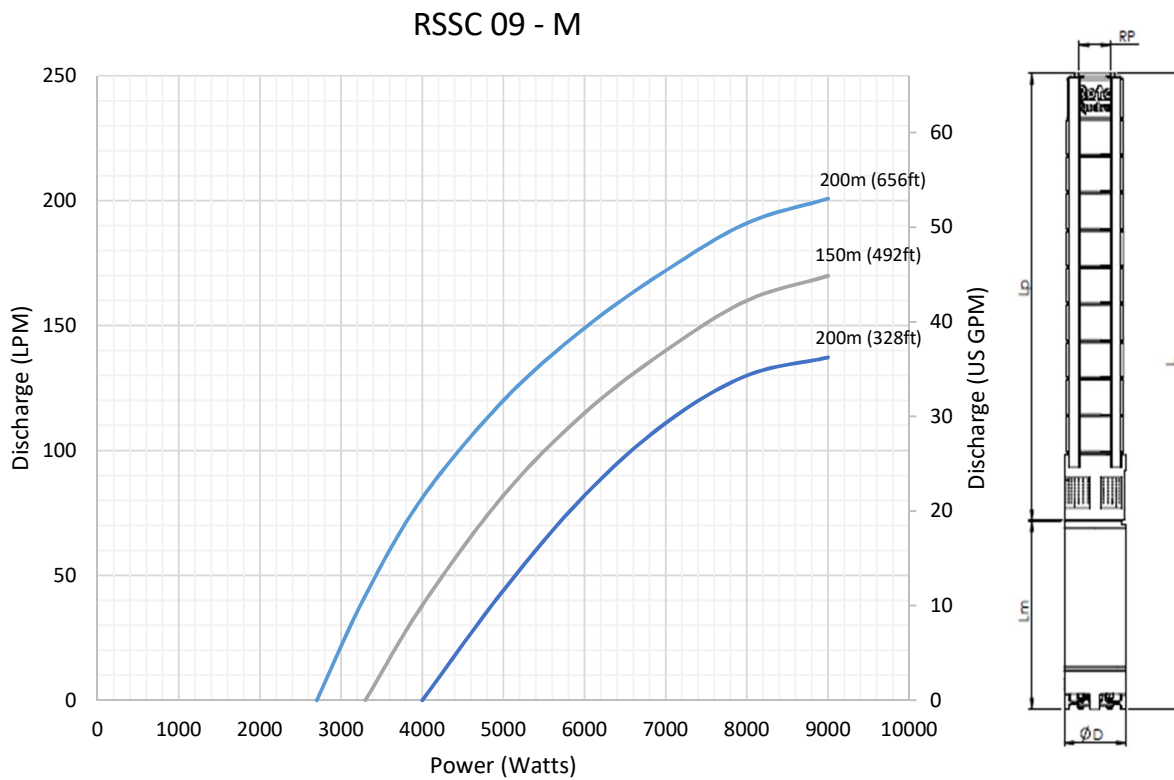
MODEL: RSSC 09 - M

9000 WATT, 380V Motor, 6x4

SYSTEM CODE: 12N045QAM1P60L

DUTY HEAD (METER): 150 m

DC Solar	INPUT POWER (WATTS)							
	9000	8000	7000	6000	5000	4000	3300	2700
HEAD (M)	FLOW (LPM)							
200	137	130	111	82	44	0		
150	170	160	140	115	82	38	0	
100	201	191	172	149	120	81	42	0



PRODUCT WEIGHT & DIMENSIONS

PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12N045QAM1P60X	102	51	2933 + 540	MSRUPWPC150	12	307 X 275 X 181

SOLAR SUBMERSIBLE CENTRIFUGAL PUMP-SET

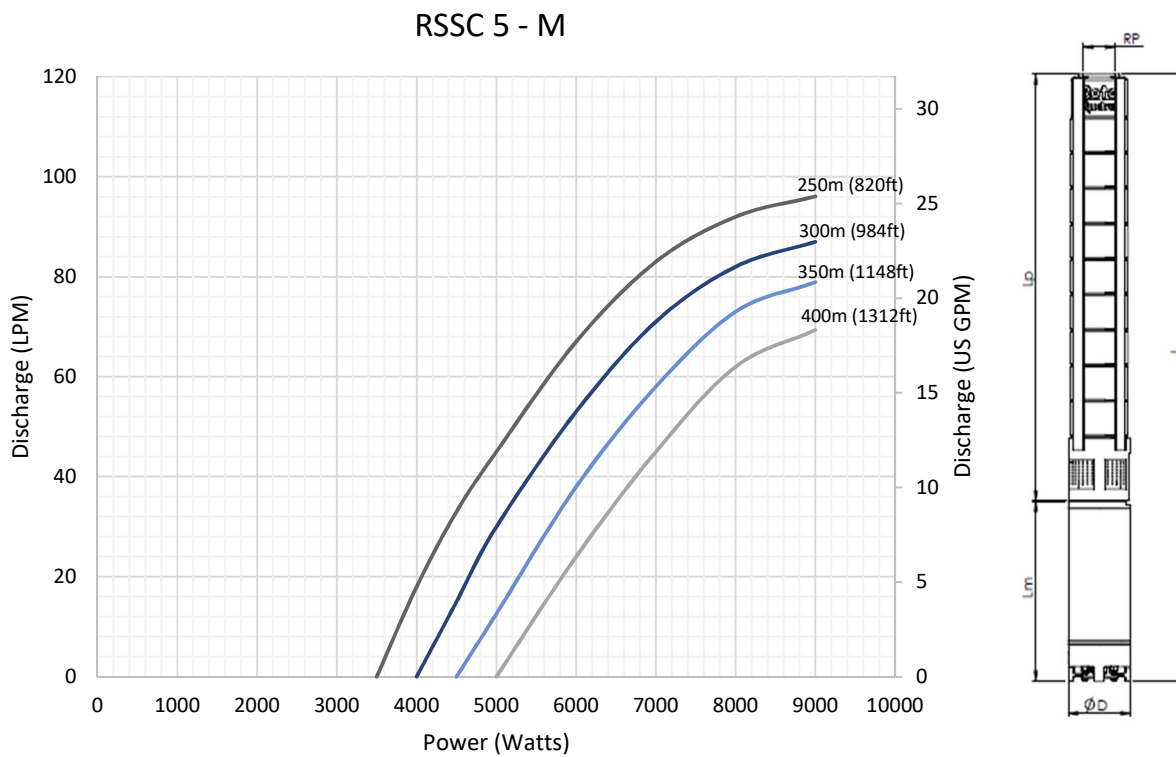
MODEL: RSSC 05 - M

9000 WATT, 380V Motor, 6x4

SYSTEM CODE: 12R085PAM1P60L

DUTY HEAD (METER): 350 m

DC Solar	INPUT POWER (WATTS)							
	9000	8000	7000	6000	5000	4500	4000	3500
HEAD (M)	FLOW (LPM)							
400	69	62	45	24	0			
350	79	73	58	38	13	0		
300	87	82	71	53	30	15	0	
250	96	92	83	67	45	33	18	0



PRODUCT WEIGHT & DIMENSIONS

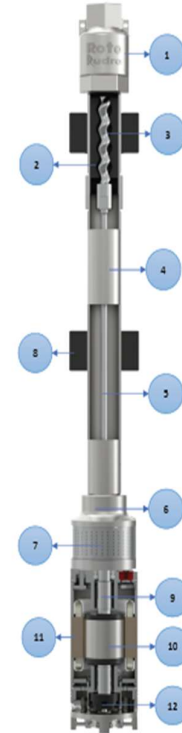
PUMP-SET				CONTROLLER		
Product Code	G. Weight [kg.]	Outlet [mm]	L p + L m [mm]	Product Code	G. Weight [kg.]	L x B x H [mm]
12R085PAM1P60X	80	38	2694 + 540	MSRUPWPC250	12	307 X 275 X 181

4. Technical Data -

a. Pump Construction –

Helical Rotor Pump-set

POS.	COMPONENT	MOC
1	Non-Return Valve (NRV)	Stainless steel AISI 304/ 316
2	Helical Rotor	Stainless steel AISI 304/ 316
3	Bonded Stator	Nitrile Rubber+SS304/ 316
4	Barrel	Stainless steel AISI 304/ 316
5	Flexible Rod	Stainless steel AISI 304/ 316
6	Suction Body/Pump Lantern	Stainless steel AISI 304/ 316
7	Strainer	Stainless steel AISI 304/ 316
8	Stabilizer	Nitrile Rubber
9	Motor shaft	Stainless steel AISI 431/ 316
10	Rotor Stack	CRNGO (50 C 470 grade)
11	Stator Stack	CRNGO (50 C 470 grade)
12	Thrust Bearing	Carbon + SS304



Centrifugal Pump-set

POS.	COMPONENT	MOC
1	Non-Return Valve (NRV)	Stainless steel AISI 304
2	Impeller	Stainless steel AISI 304
3	Diffuser	Stainless steel AISI 305
4	Pump Shaft	Stainless steel AISI 304
5	Cable Cover	Stainless steel AISI 304
6	Stage/ Bowl	Stainless steel AISI 304
7	Rubber Ring for Bowl	Nitrile Rubber
8	Suction Chamber	Stainless steel AISI 304
9	Strainer	Stainless steel AISI 304
10	Motor shaft	Stainless steel AISI 431
11	Rotor Stack	CRNGO (50 C 470 grade)
12	Stator Stack	CRNGO (50 C 470 grade)
13	Thrust Bearing	Carbon + SS304



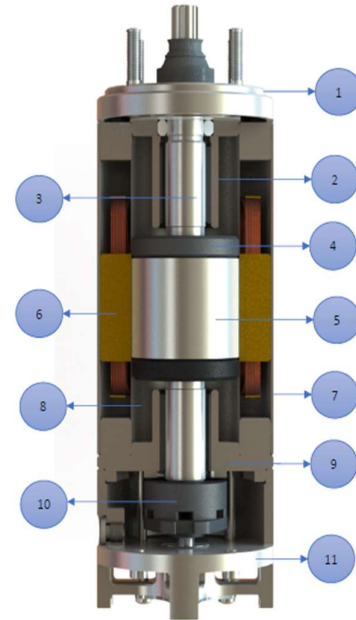
b. Motor Construction-

Resin filled PMSM Motor

POS.	COMPONENT	MOC
1	Upper Bearing Housing	Stainless steel AISI 304
2	Bush	Carbon
3	Motor shaft	Stainless steel AISI 431
4	Balancing Ring	CED Coated Cast Iron
5	Rotor Stack	CRNGO (50 C 470 grade)
6	Stator Stack	CRNGO (50 C 470 grade)
7	Outer Pipe	Stainless steel AISI 304
8	Inner Pipe	Stainless steel AISI 304
9	Lower Bearing Housing	Stainless steel AISI 304
10	Thrust Bearing	Carbon + SS304
11	Motor Base	Stainless steel AISI 304

TECHNICAL DETAILS

Rating	0.75 kW to 7.5 kW
Phase	3
Direction of Rotation	Anti-Clock Wise
Degree of Protection	IP 68
Class of Insulation	H
Type of Duty	S1
Nominal Ambient Temp.	40
Maximum Liquid Temp.	33
Frequency of Starts/Hour	30
Max. Outer Diameter (in mm)	96 (4") & 141 (6")



PERFORMANCE AND DIMENSIONS DATA

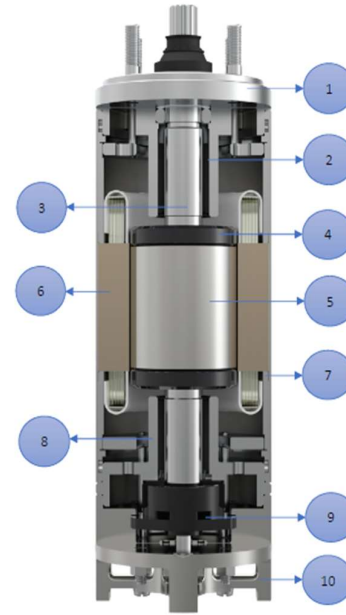
Motor Size (Inch)	Output Power [kW]	Output Power [HP]	Thrust [N]	Voltage [V]	Current [A]	Speed [R.P.M.]	Frequency [Hz]	Efficiency [%]	Power Factor [%]	Rated Torque [Nm]	Cable Size [Sq. mm]	Cable Length [mm]	Motor Height [mm]	Motor Weight [kg]
4"	0.75	1	3000	50	10.5	3000	250	81	97	2.4	1.5	2	277	8
	0.75	1	3000	70	8.3	3000	250	81	97	2.4	1.5	2	277	8
	1.5	2	3000	100	9.8	3000	250	84	95	4.8	1.5	2	307	9.2
	2.2	3	3000	150	10.5	3000	250	86	95	7	1.5	3	337	10.4
	3.7	5	5000	230	11.4	3000	250	88	95	11.8	1.5	3	447	13.1
6"	5.5	7.5	16000	350	10.6	3000	250	90	95	17.5	4	3	545	35
	7.5	10	16000	380	13.1	3000	250	91	95	23.9	4	3	565	40

Water filled PMSM Motor

POS.	COMPONENT	MOC
1	Upper Bearing Housing	Stainless steel AISI 304
2	Bush	Carbon
3	Motor shaft	Stainless steel AISI 431
4	Balancing Ring	CED Coated Cast Iron
5	Rotor Stack	CRNGO (50 C 470 grade)
6	Stator Stack	CRNGO (50 C 470 grade)
7	Stator Tube	Stainless steel AISI 304
8	Lower Bearing Housing	Stainless steel AISI 304
9	Thrust Bearing	Carbon + SS304
10	Motor Base	Stainless steel AISI 304

TECHNICAL DETAILS

Rating	0.37 kW to 7.5 kW
Phase	3
Direction of Rotation	Anti-Clock Wise
Degree of Protection	IP 68
Class of Insulation	F
Type of Duty	S1
Nominal Ambient Temp.	40
Maximum Liquid Temp.	33
Frequency of Starts/Hour	30
Max. Outer Diameter (in mm)	75 (3"), 96 (4") & 141 (6")



PERFORMANCE AND DIMENSIONS DATA

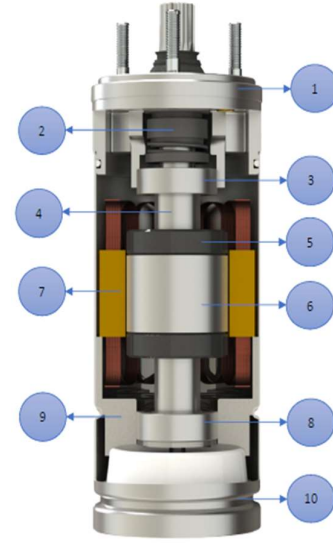
Motor Size (Inch)	Output Power [kW]	Output Power [HP]	Thrust [N]	Voltage [V]	Current [A]	Speed [R.P.M.]	Frequency [Hz]	Efficiency [%]	Power Factor [%]	Rated Torque [Nm]	Cable Size [Sq. mm]	Cable Length [mm]	Motor Height [mm]	Motor Weight [kg]
3"	0.37	0.5	3000	30	9.5	3000	250	77	97	1.17	1.5	2	300	5.2
	0.75	1	3000	50	10.5	3000	250	82	97	2.4	1.5	2	360	6.5
	0.75	1	3000	70	8.5	3000	250	83	97	2.4	1.5	2	360	6.5
	1.1	1.5	3000	70	12	3000	250	84	97	3.5	1.5	2	420	8.2
	1.5	2	3000	100	10.5	3000	250	85	97	4.8	1.5	2	480	9.5
4"	0.75	1	3000	50	10.5	3000	250	82	97	2.4	1.5	2	299	8
	0.75	1	3000	70	8.2	3000	250	83	97	2.4	1.5	2	299	8
	1.5	2	3000	100	11	3000	250	86	95	4.8	1.5	2	344	10
	2.2	3	3000	150	10	3000	250	88	95	7	2.5	3	388	12
	3.7	5	5000	230	11	3000	250	89	95	11.8	2.5	3	536	17
6"	5.5	7.5	16000	350	10.6	3000	250	90	95	17.5	4	3	585	33
	7.5	10	16000	380	13.1	3000	250	91	95	23.9	4	3	605	38

Oil filled PMSM Motor

POS.	COMPONENT	MOC
1	Upper Bearing Housing	Stainless steel AISI 304
2	Mechanical Seal	Standard
3	Ball Bearing	Standard
4	Motor shaft	Stainless steel AISI 431
5	Balancing Ring	CED Coated Cast Iron
6	Rotor Stack	CRNGO (50 C 470 grade)
7	Stator Stack	CRNGO (50 C 470 grade)
8	Ball Bearing	Standard
9	Lower Bearing Housing	Stainless steel AISI 304
10	Stator Tube/Pipe	Stainless steel AISI 304

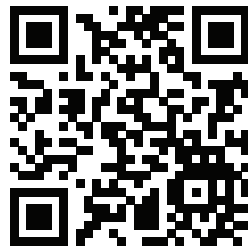
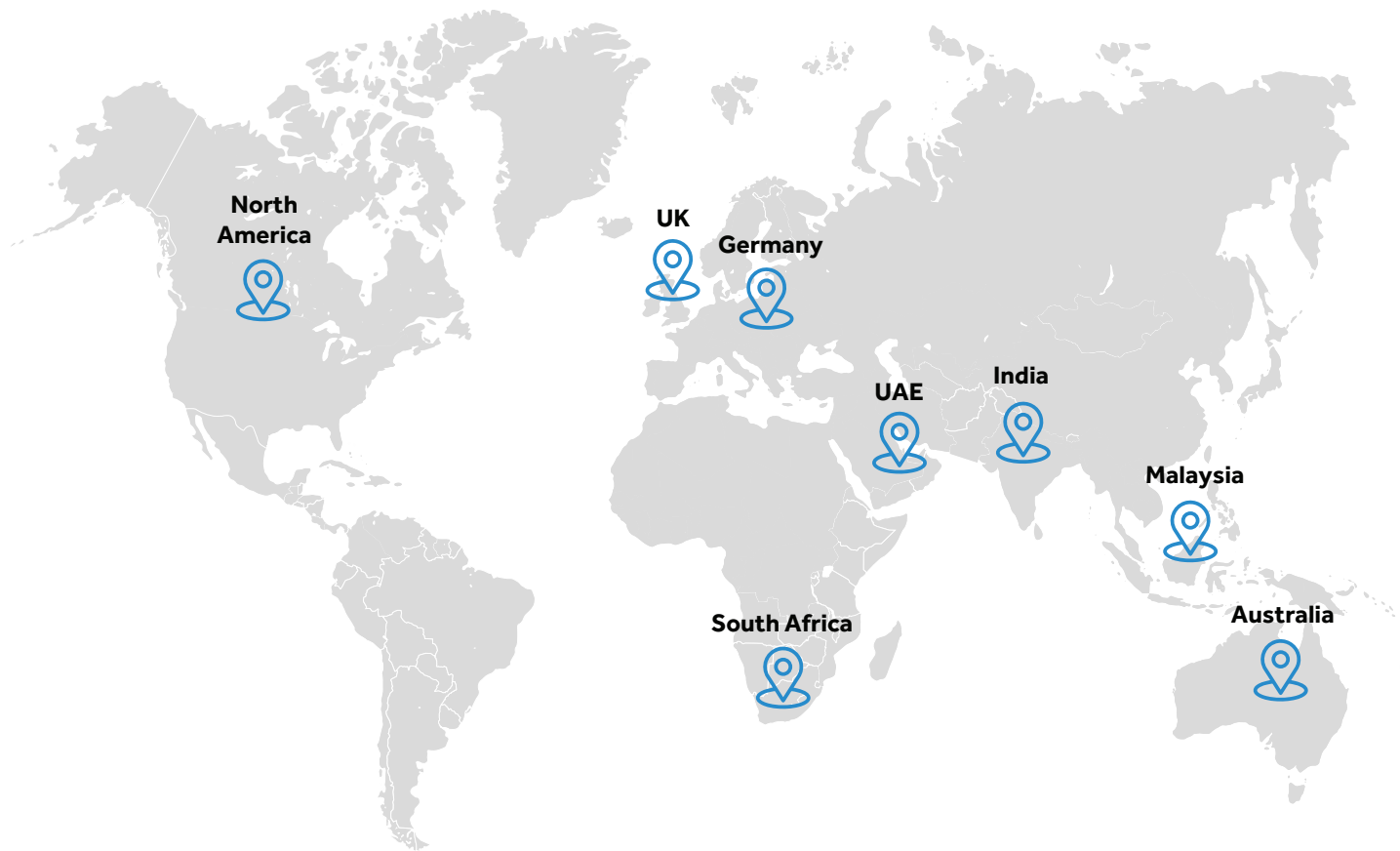
TECHNICAL DETAILS

Rating	0.37 kW to 3.7 kW
Phase	3
Direction of Rotation	Anti-Clock Wise
Degree of Protection	IP 68
Class of Insulation	H
Type of Duty	S1
Nominal Ambient Temp.	40
Maximum Liquid Temp.	33
Frequency of Starts/Hour	30
Max. Outer Diameter (in mm)	75 (3"), & 96 (4")



PERFORMANCE AND DIMENSIONS DATA

Motor Size (Inch)	Output Power [kW]	Output Power [HP]	Thrust [N]	Voltage [V]	Current [A]	Speed [R.P.M.]	Frequency [Hz]	Efficiency [%]	Power Factor [%]	Rated Torque [Nm]	Cable Size [Sq. mm]	Cable Length [mm]	Motor Height [mm]	Motor Weight [kg]
3"	0.37	0.5	3000	30	9.5	3000	250	77	97	1.17	1.5	2	234	3.3
	0.75	1	3000	50	10.5	3000	250	82	97	2.4	1.5	2	264	4
	0.75	1	3000	70	8.5	3000	250	83	97	2.4	1.5	2	264	4
	1.1	1.5	3000	70	12	3000	250	84	97	3.5	1.5	2	294	4.7
	1.5	2	3000	100	10.5	3000	250	85	97	4.8	1.5	2	339	5.7
4"	0.75	1	3000	50	10.5	3000	250	82	97	2.4	1.5	2	333	6
	0.75	1	3000	70	8.3	3000	250	84	97	2.4	1.5	2	333	6
	1.5	2	3000	100	10.8	3000	250	86	95	4.8	1.5	2	363	6.5
	2.2	3	3000	150	10.3	3000	250	86	95	7	2.5	3	393	7



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