



SUBMERSIBLE SOLAR PUMPS

• AGRICULTURE • IRRIGATION • INDUSTRIAL • DOMESTIC



SOLARPUMPS.COM
866.519.7892

AMERICAN QUALITY

ENGINEERED, ASSEMBLED & TESTED IN THE USA



ENGINEERED FOR TRUSTED DURABILITY

Every pump takes shape in our engineering department. Using the latest in drafting software and processes, our Design Engineers create a product matched by none.

API works countless hours maintaining our claims to provide quality, reliable products.

Using billet materials sourced through quality, USA vendors, and inspecting, cutting, and machining in house. Our pump drives are designed and manufactured in the USA.

Every component used to create an API pump is carefully chosen, and finely tuned to provide a product we are proud to stand behind.

ASSEMBLED & TESTED FOR SUPERIOR QUALITY

Assembly technicians take every pump component and combine them to withstand rigorous quality tests.

Every API pump is assembled in our facility and processed through our custom pump tester. Here they undergo a performance test, each pump must pass a multitude of testing parameters before being sold, including;

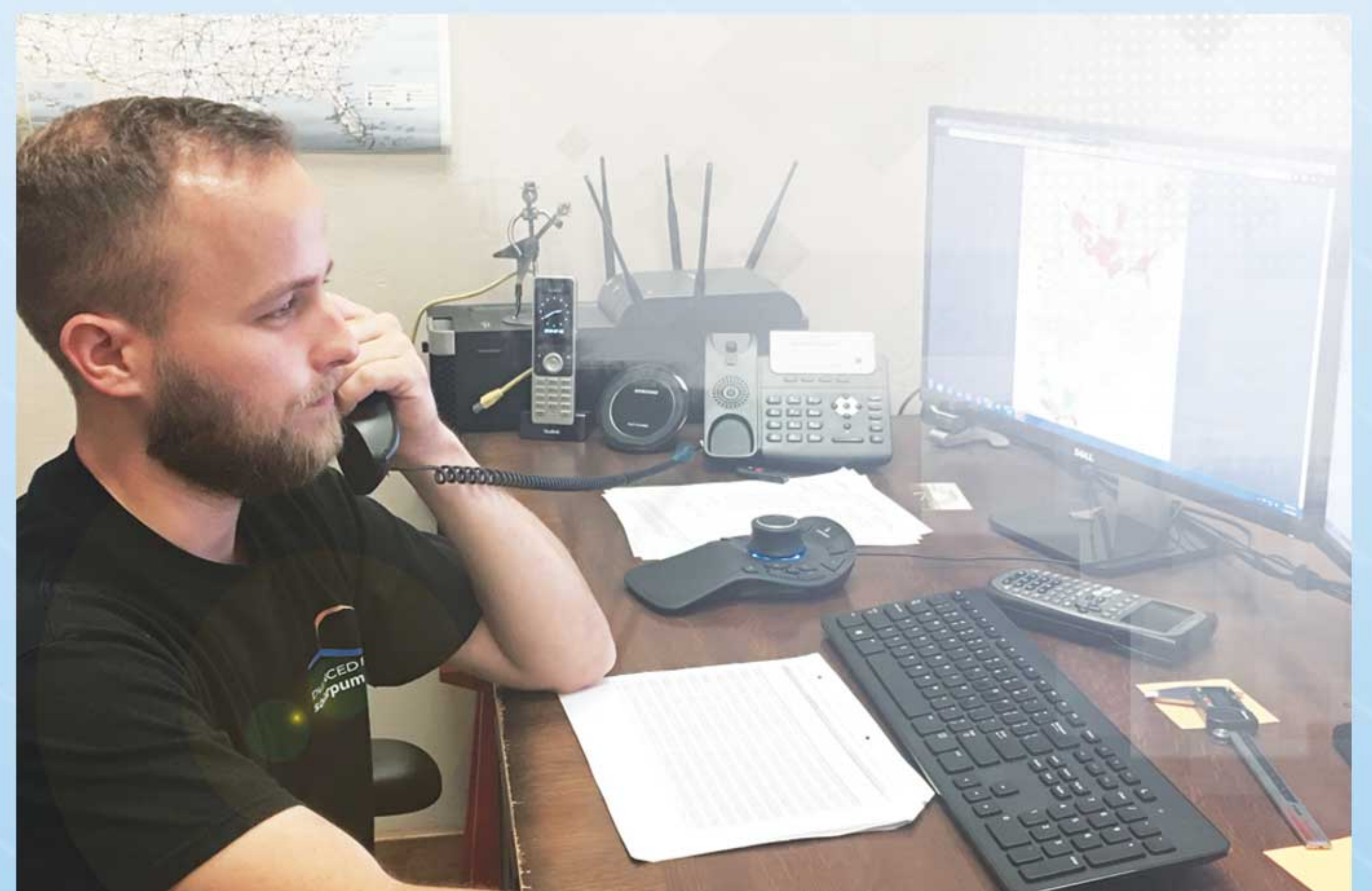
- ☑ power changes
- ☑ flow rate
- ☑ pressure
- ☑ amperage draw

FREE TECH SUPPORT WITH EVERY PURCHASE

Our friendly technicians are here to help you when you have questions.

Our staff and quick turnaround services will be there to walk you through the process with ease. The service department is ready to fulfill any questions you may have.

Contact us at 866-519-7892



MADE FOR VERSITILITY

The benefits of choosing our small submersible pumps is the adaptability we can provide for each application.

Whether you need water for seasonal or year-round, our pumps have provided water for over 30 years, for countless types of applications. Our pumps are easy to install and portable to move from one location to another.

API Pumps are great for submersible applications, for high or low flow needs.



SOURCING WATER FOR MULTIPLE APPLICATIONS:

- ✓ **LIVESTOCK & WILDLIFE**
- ✓ **SMALL IRRIGATION & SPRINKLERS**
- ✓ **DEWATERING & SUMP PUMP**
- ✓ **HOMES & CABINS**
- ✓ **MAINTAINING PONDS**
- ✓ **& MUCH MORE!**



HOW CAN WE HELP YOU?

- Portability: Move your pump from well to well with our easy plug & play connectors.
- Cost Efficient: Gain a return on your solar investment in future years to come.
- Functionality: Solar will function efficiently in extreme weather conditions.
- Versatility: Universal application allows you to use your pumps for more than one operation.
- Quality: We provide only the highest quality products on the market.

STANDING OUT FROM THE INDUSTRY STANDARD.

	API Pumps	Industry Standard
Brushless Motor	✓	LIMITED
Rebuildable	✓	LIMITED
Requires additional purchase of controllers	X	✓
Requires additional purchase of wire	X	✓
Requires additional purchase of batteries	X	LIMITED
Warranty	2-3 YEARS	1 YEAR
Made in the USA	✓	X
Free Tech Support	✓	LIMITED



FREE TECH SUPPORT WITH EVERY PURCHASE.



Technical support from our manufacturing facility in Weatherford, OK, USA!

Services under one roof, to provide the best customer service possible!

BRUSHLESS MOTORS VS. BRUSH-STYLE MOTORS

Our brush-less motors have a longer life expectancy & are more dependable compared to brush motors. We have developed a special frequency drive to operate our brush-less motors on direct solar or batteries.

Brush motors compared to brush-less motors tend to wear out faster due to the contact & friction. This puts more strain on the commutator, brush motors brushes must be cleaned and replaced for continued operation.

Brush-less motors beat brush motors in the speed/torque trade off with their ability to maintain or increase torque at various speeds. Importantly, there's no power loss due to brushes, making the components significantly more efficient. They also require less and sometimes no maintenance due to the rotor being the sole bearer of the magnets. Requires no connections, no commutator, and no brushes.

Other brush-less motor pros include high output power, small size, better heat dissipation, higher speed ranges, and low-noise (mechanical and electrical) operation.



IN THE DETAILS

THE PUMPS

- Factory Rebuildable
- Stainless Steel for Life
- Made in the USA
- CNC Machined & Engineered
- Abrasion and Corrosion Resistance.

THE MOTOR

- 180-watt 1/5HP
- Brushless Heavy Duty Motor
- Temporary Run-Dry Capabilities
- Limited Overvoltage Protection
- Reverse Polarity Protection
- Positive Displacement
- Super Efficient Internal Drive
- Custom Designed & Built For API

SAFETY FEATURES

- Safety hooks available on stainless steel pumps.
- Pressure Relief Valve

INTERNAL DRIVES

- Low Voltage Input For Safe Operation
- Runs on any 12-36 VDC power source.
- Designed by API

WIRING

- 100FT, 150FT, 200FT Available
- 14-Gauge Pump Wire
- Built into the Pump
- No Under Water Splicing Needed

HOUSING

- CNC Machined
- Welded in Oklahoma.
- 304 Stainless Steel



MERLIN SERIES- M3	
LOADED VOLTAGE	12-32VDC
MAX. OPEN VOLTAGE	50VDC
MAX. AMPS	6 AMPS
MAX. SUBMERGENCE	100FT (43psi)
MAX. LIFT/PRESSURE	160FT (69psi)
MAX. OPEN FLOW	3 GAL/MIN
MODEL #	535113

ADVANCED POWER
solarpumps.com
ANY PUMP DIS-ASSEMBLY VOIDS WARRANTY
FOR SERVICE PLEASE CALL 877.519.7893

WHY CHOOSE SUBMERSIBLE?

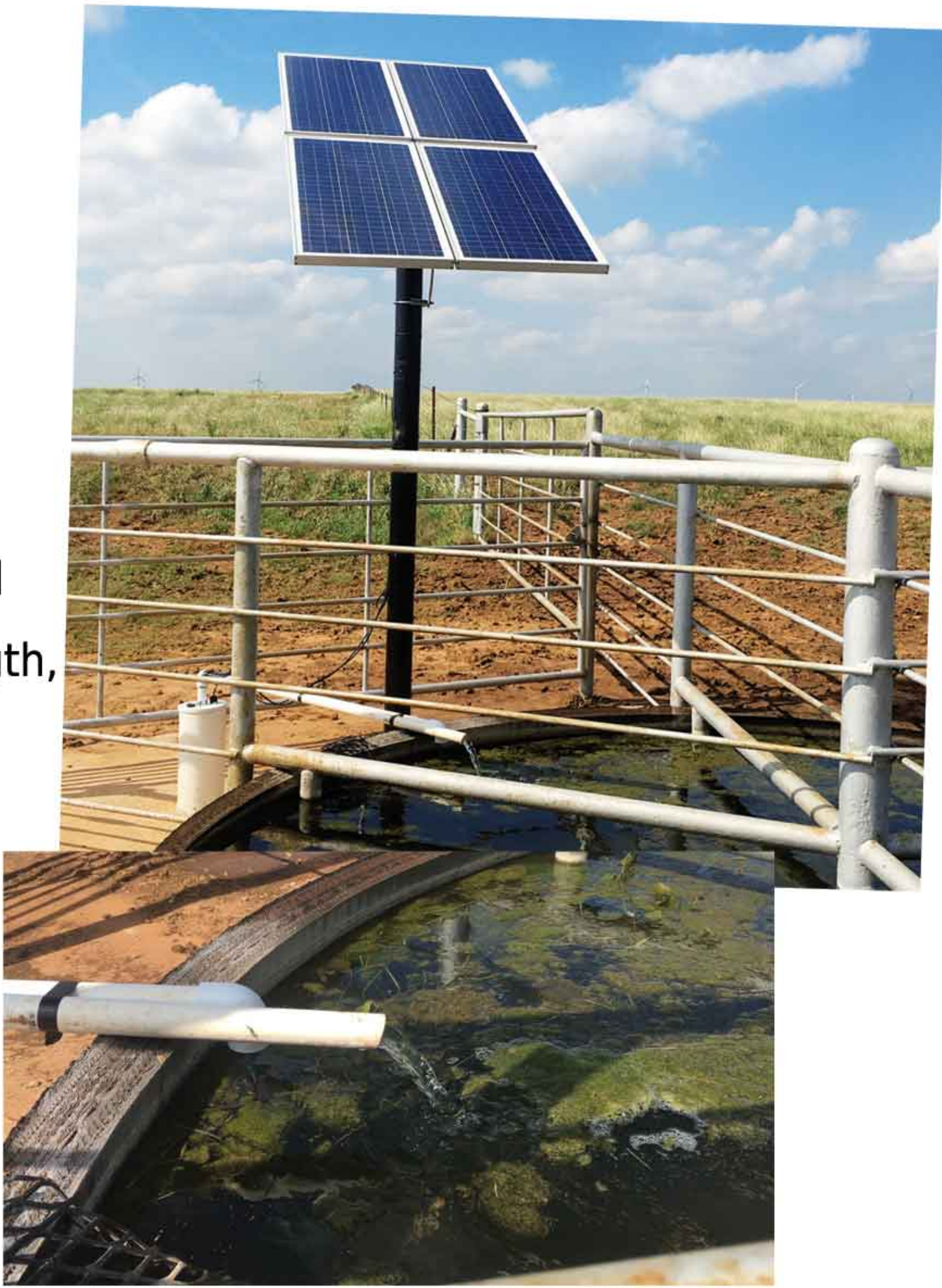
Submersible pumps as their name portrays, are completely submerged in a clean water source. This gives them a number of advantages over their unprotected counterparts.

- One huge thing is their efficiency; water pressure will naturally force water into a submerged pump rather than utilizing energy to do so.
- Being submerged all the time, submersible pumps do not require manual priming, which can easily become a very time consuming chore.
- Cooling is also greatly improved because the pump uses the surrounding water as a heat sink.
- Surface mounted pumps are also known to be much louder, and since it is on the surface, it just looks out of place. If you plan on using a water pump near a home or just want to keep nature looking natural, opting for the submersible may be the option for you.

Learn the difference between Submersible Pumps VS. Surface Mounted Pumps at
<https://solarpumps.com/articles/2016/submersible-water-pumps-vs-surface-mounted>

MERLIN SERIES

The innovative Merlin Series solar pumps are constructed with a 304 stainless steel housing and components. Designed to provide a longer pump life, increased strength, and trusted durability.



- ✓ SUBMERSIBLE
- ✓ FACTORY REBUILDABLE
- ✓ CORROSION RESISTANT
- ✓ MADE IN THE USA

Low volume flow rate with long run time capability means a low impact and reliable water source. Water production is long term with minimable service maintenance.

Series	Part Number	Max Open Flow	Min Flow	Max Depth	Length of Wire	Casing Diameter Required
M1	535111	1.0 GPM	0.3 GPM	220FT or 95 PSI	100-200FT	4IN
M3	535113	3.0 GPM	0.9 GPM	150FT or 65 PSI	100-200FT	4IN
M5	535115	5.0 GPM	1.1 GPM	100FT or 43 PSI	100-200FT	5IN

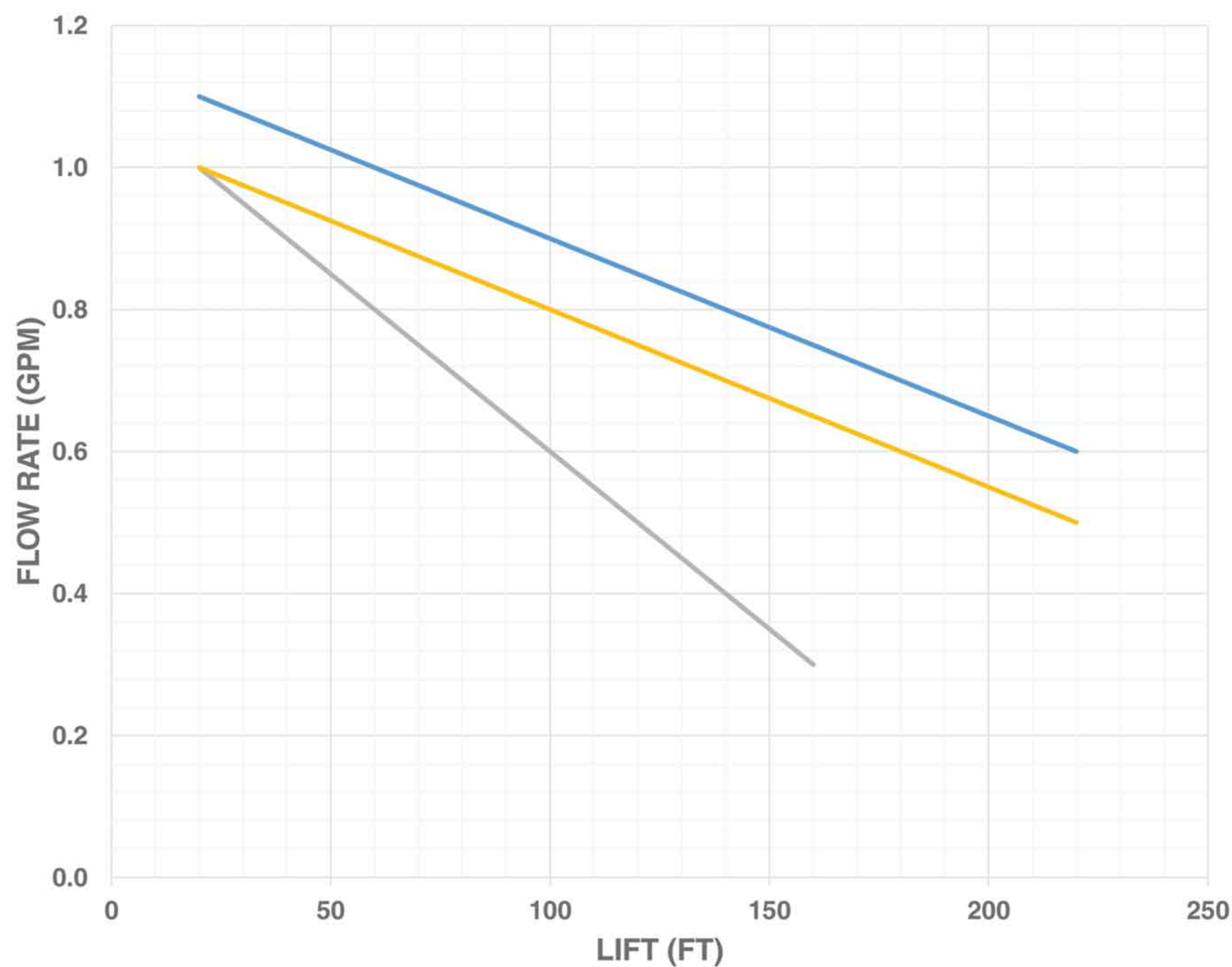


- KEY FEATURES:**
- 180-watt 1/5 HP Brushless 12-32 VDC Heavy Duty Motor
 - **2 year manufacturers warranty**
 - 304 Stainless Steel for life
 - Lightweight & durable
 - No external drives or controllers required
 - Free technical support
 - 304 Stainless Steel parts for life
 - Limited overvoltage protection up to 50VDC over volt
 - Positive displacement
 - Temporary run dry capability
 - Internal pressure relief valve



FLOW CHARTS

M1 SOLAR PUMP FLOW CHART



M1 SOLAR PUMP IS INTERCHANGEABLE
WITH OTHER M3 SYSTEMS

— 26V
— 31V
— 34V

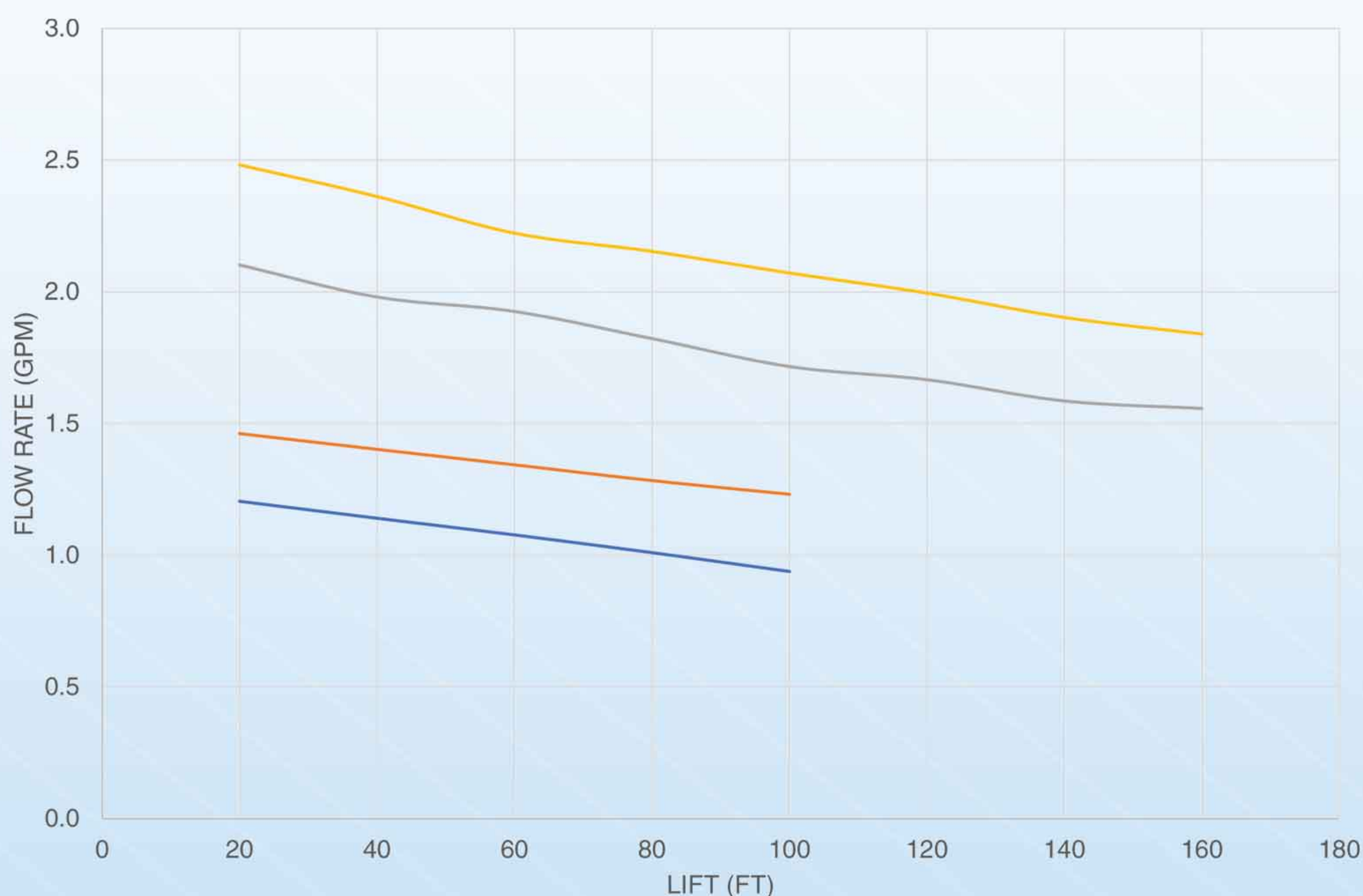
GPD= ESTIMATED GALLONS PER DAY,
BASED ON A 7-HOUR RUN TIME.



Systems include: Brushless Water Pump, Solar Panels, Pre-Filter Kit,
Top of Pole Aluminum Mounts, Wiring, Fittings & 100' of Pump Cable.

For more information on our systems please view our
KS System Brochure or online at solarpumps.com/products/completesystems

M3 SOLAR PUMP FLOW CHART



SYSTEMS COMPATIBLE WITH M3:

KS03 500 GPD

KS12 1400 GPD

KS19 1500 GPD

KS21 2500 GPD

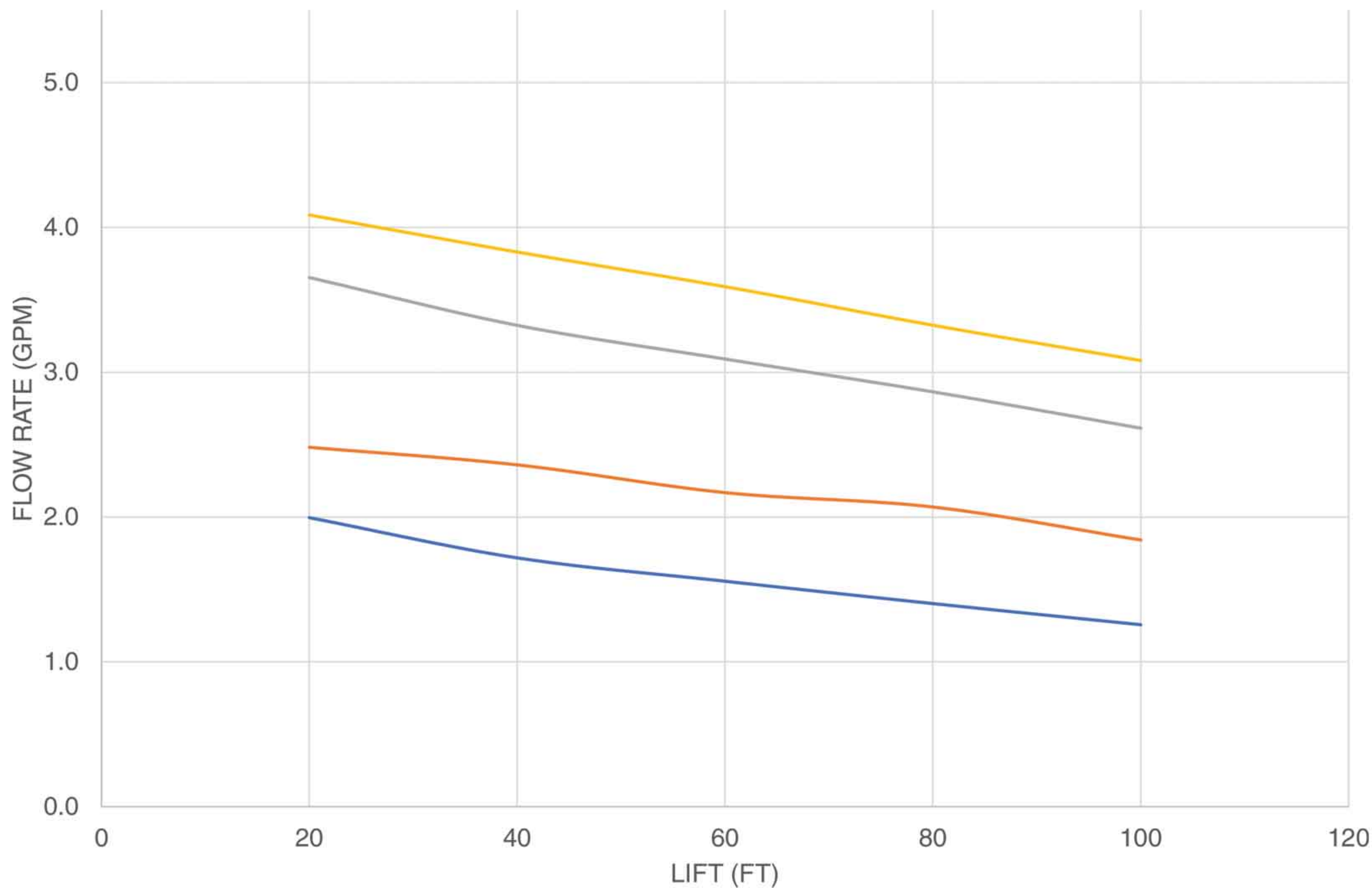
— 12V
— 17V or KS03
— 26V
— 31V or KS12, KS19, KS21

SPECS FOR MERLIN SERIES:

- Max. operating temperature in water: 110°F
- Max. 6.5-7.2 pH-balance water
(these pumps are **not** intended for saltwater)
- No water splice needed.
- Open flow operation

FLOW CHART

M5 SOLAR PUMP FLOW CHART



SYSTEMS COMPATIBLE WITH M5:

KS08 1000 GPD

KS18 2100 GPD

KS20 2200 GPD

KS22 4200 GPD

— 12V

— 17V or KS08

— 26V

— 31V or KS18, KS20, KS22

GPD= ESTIMATED GALLONS PER DAY,
BASED ON A 7-HOUR RUN TIME.

SPECS FOR MERLIN SERIES:

- Max. operating temperature in water: 110°F
- Max. 6.5-7.2 pH-balance water
(these pumps are **not** intended for saltwater)
- No water splice needed.
- Open flow operation



Check out our videos of the Merlin Series Pumps
in action, on our website or YouTube channel!

<https://solarpumps.com/resources>

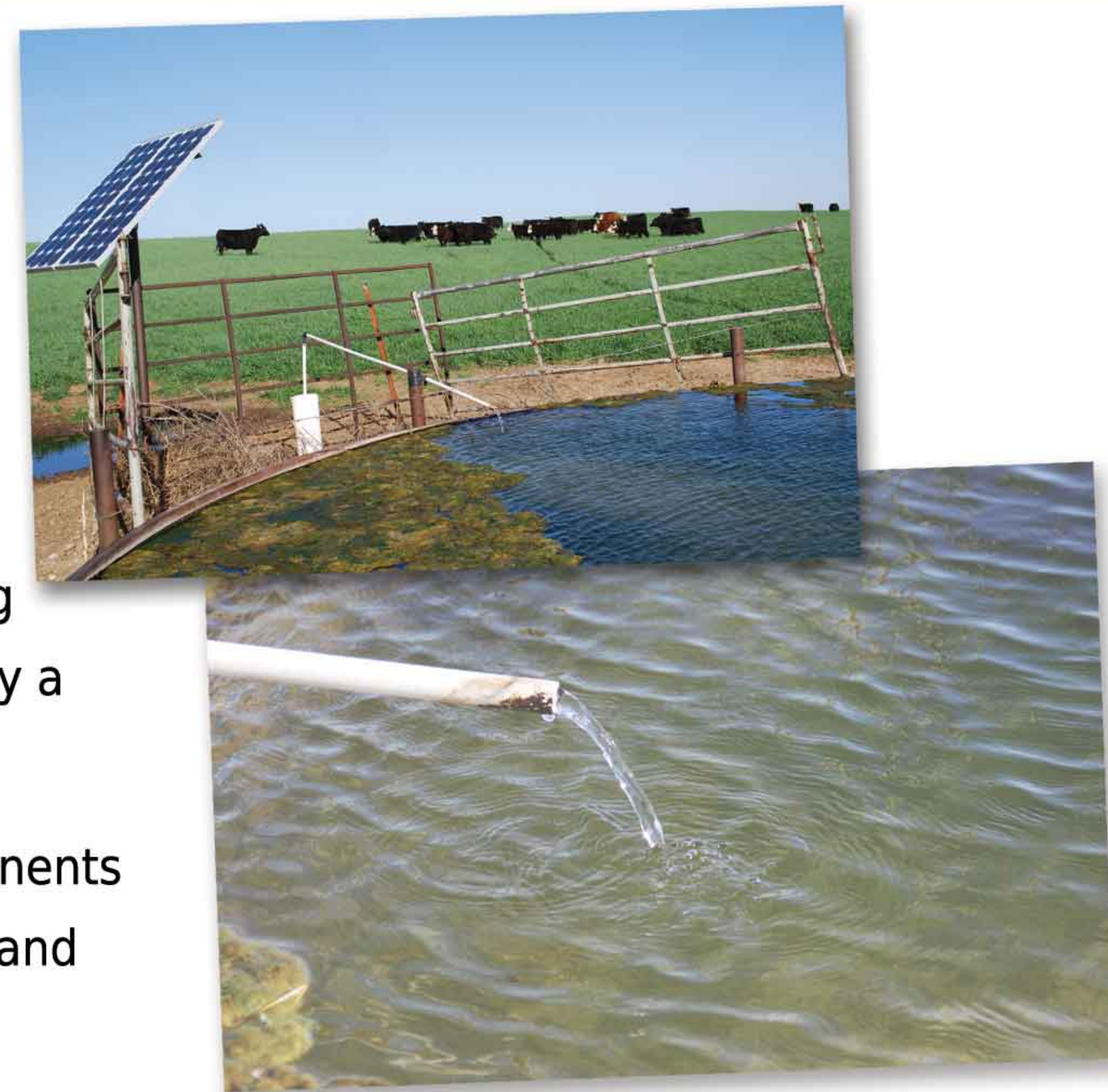
RP

RanchPump

RanchPumps reflect nearly 30 years of API's solar pump manufacturing and engineering expertise to build the industry's best pump, backed by a three-year warranty to prove it.

This solar pump is constructed with stainless steel housing and components which are designed to provide a longer pump life, increased strength, and trusted durability.

- ✓ SUBMERSIBLE
- ✓ FACTORY REBUILDABLE
- ✓ CORROSION RESISTANT
- ✓ MADE IN THE USA



KEY FEATURES:

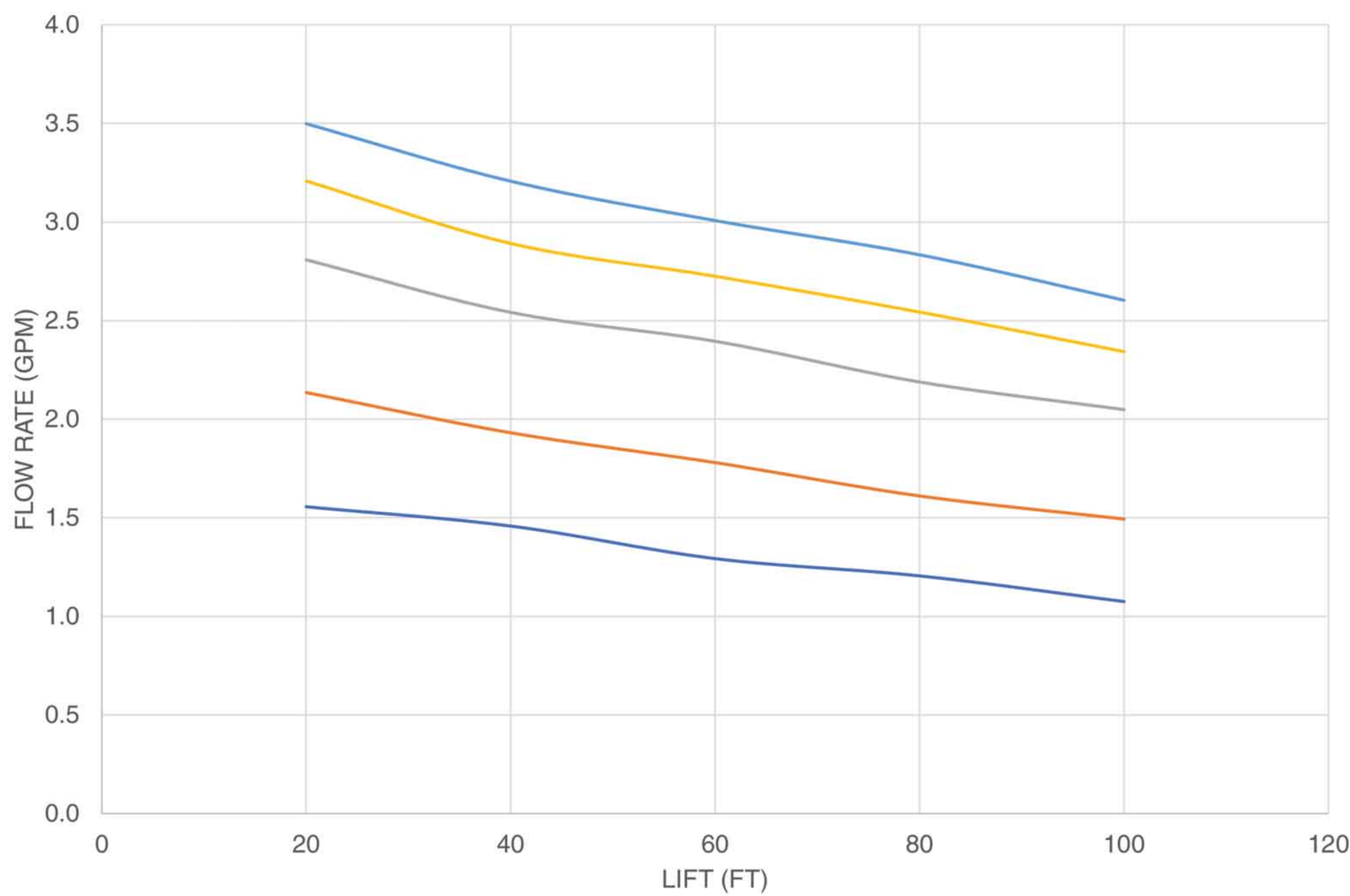
- 180-watt 1/5 HP Brushless 12-36 VDC Heavy Duty Motor
- **3 year manufacturers warranty**
- CNC Manufactured from 304 stainless steel
- Lightweight & durable
- No external drives or controllers required
- Free technical support
- 304 Stainless Steel parts for life
- Limited overvoltage protection up to 50VDC over volt
- Positive displacement
- Temporary run dry capability
- Internal pressure relief valve



Series	Part Number	Max Open Flow	Min Flow	Max Depth	Length of Wire	Casing Diameter Required
R2	535472	2.7 GPM	0.9 GPM	150FT or 65 PSI	100-200FT	4IN
R4	535474	3.5 GPM	1.0 GPM	100FT or 43 PSI	100-200FT	5IN

FLOW CHARTS

R4 SOLAR PUMP FLOW CHART



SYSTEMS COMPATIBLE WITH R4:

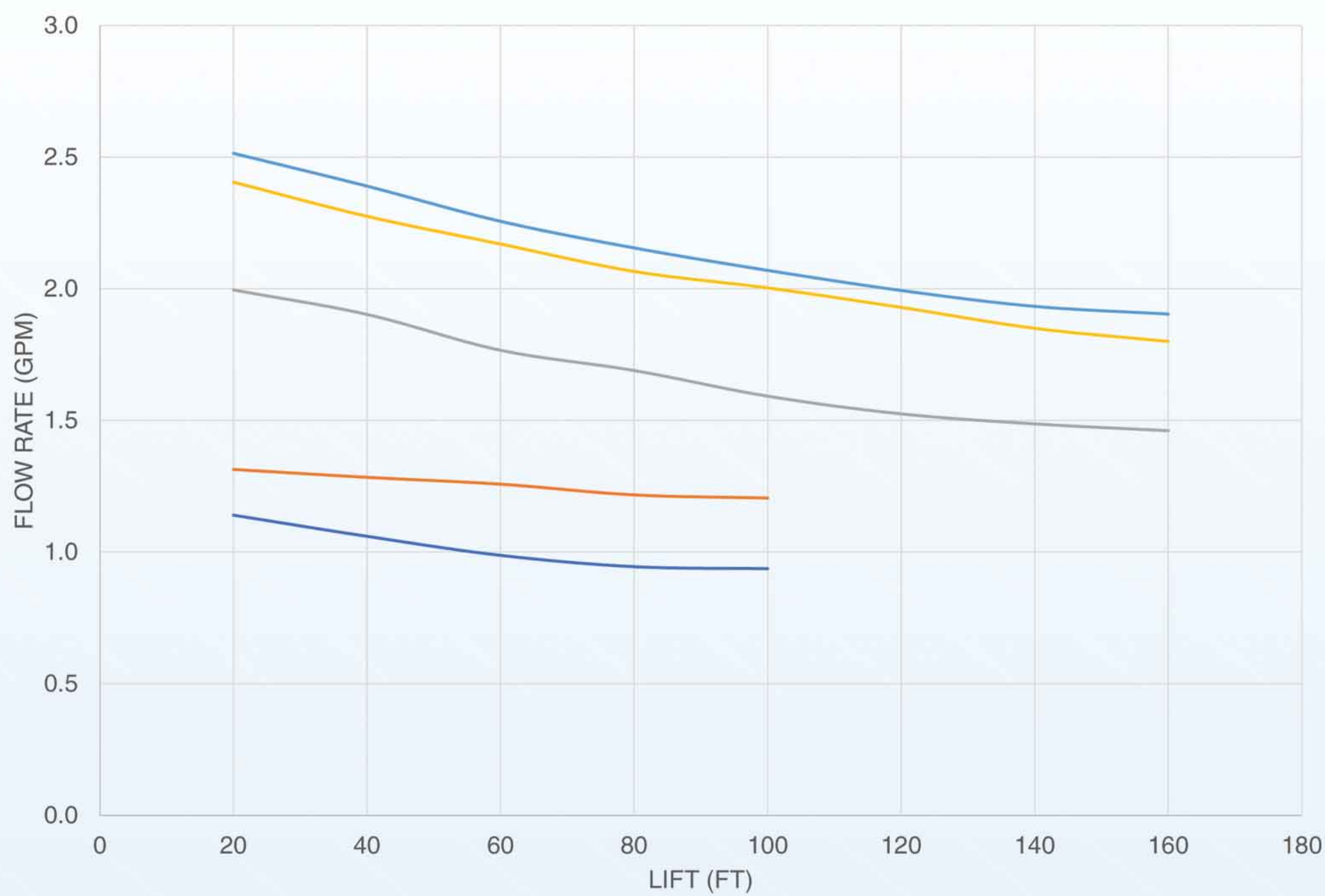
KS05	550 GPD
KS10	1350 GPD
N250R4	1500 GPD
KS17	2000 GPD

- 12V
- 17V or KS05
- 26V
- 31V or N250R4
- 34V or KS10, KS17

SPECS FOR RANCHPUMPS:

- Max. operating temperature in water: 110°F
- Max. 6.5-7.2 pH-balance water (these pumps are **not** intended for saltwater)
- No water splice needed.
- Open flow operation

R2 SOLAR PUMP FLOW CHART



SYSTEMS COMPATIBLE WITH R2:

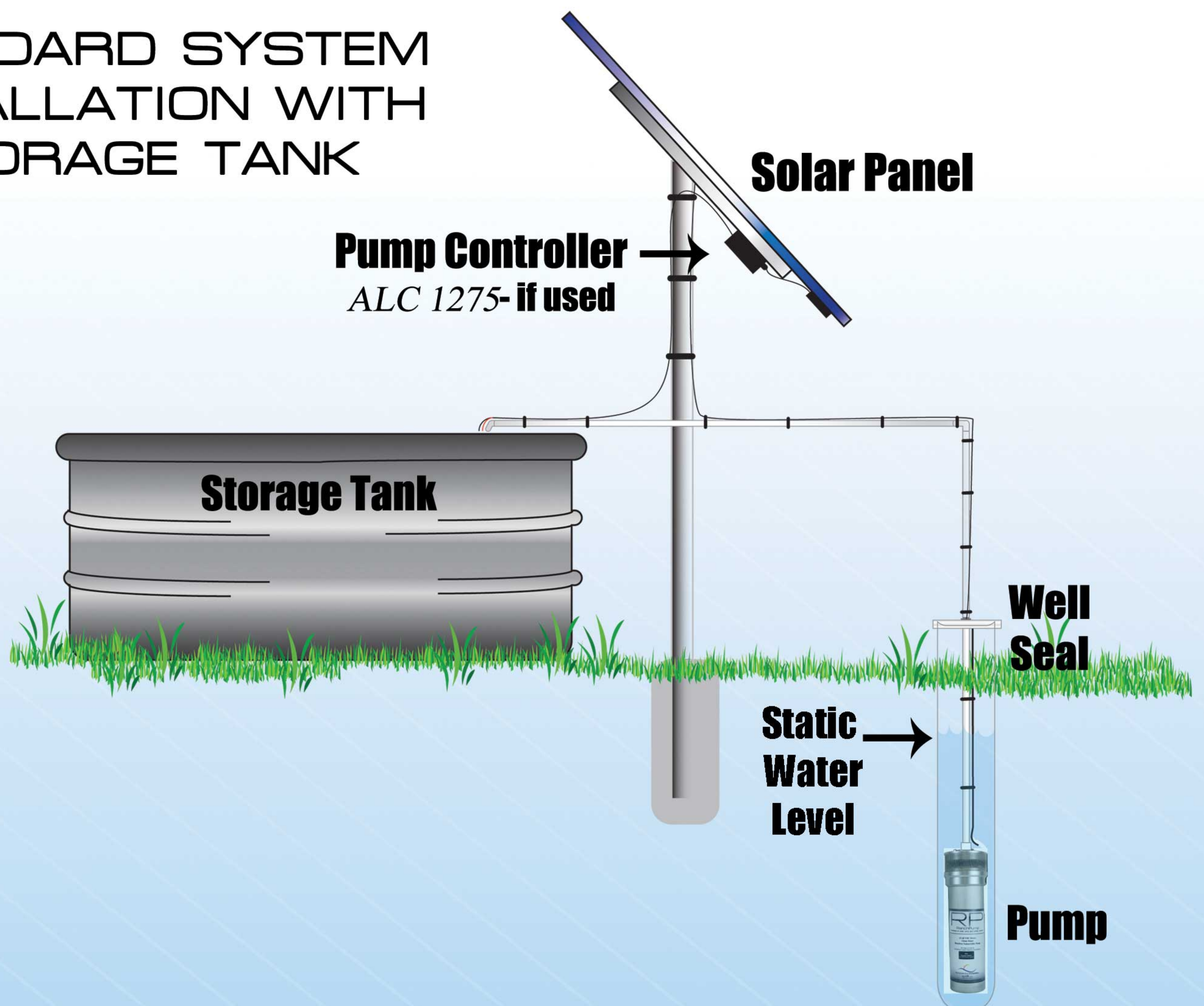
KS02	420 GPD
KS07	950 GPD
N250R4	1500 GPD
KS14	1500 GPD

- 12V
- 17V or KS02
- 26V
- 31V or K250R2
- 34V or KS07, KS14

CERTIFICATIONS



STANDARD SYSTEM INSTALLATION WITH STORAGE TANK





ADVANCED POWER®

“It’s Watt We Do!”

solarpumps.com

866.519.7892



**ONLINE SHOPPING
NOW AVAILABLE!**

CONTACT US

Customer Service:

**(Toll Free) 1-866-519-7892
1-580-774-2220**

Billing Address:

**P.O. Box 1937
Weatherford, OK 73096**

Service & Returns Address:

**1520 E. Eagle Rd.
Weatherford, OK 73096**

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