



WORKHORSE

W2H, W3C, W3H





Narrow Series

2 Inch & 3 Inch with External Controller

- Permanent Magnet DC brushless motor
- Rebuildable centrifugal pump ends
- Solar or Battery DC Input
- Field Repairable Helical Mechanisms
- Variable speed controller PSC100
- 304 Stainless Steel pump and motor
- Variable current & Over voltage protection
- Water-lubricated thrust bearings
- Water-filled encapsulated motor
- Soft start and soft stop to extend life
- Run-Dry protection with Sensors
- Extremely reliable
- Laser welded stainless housing
- Comprehensive 2 Year Warranty

Models:

W3C-20-150

W3H-5-200

W2H-5-200

PSC100 Required

(included standard)

Input Voltage:

DC 36 – 72 Vmp, Max Voc 90V

If 110V AC Input is needed, AC to DC Converter Optional

Current Range: 1.5 – 11A

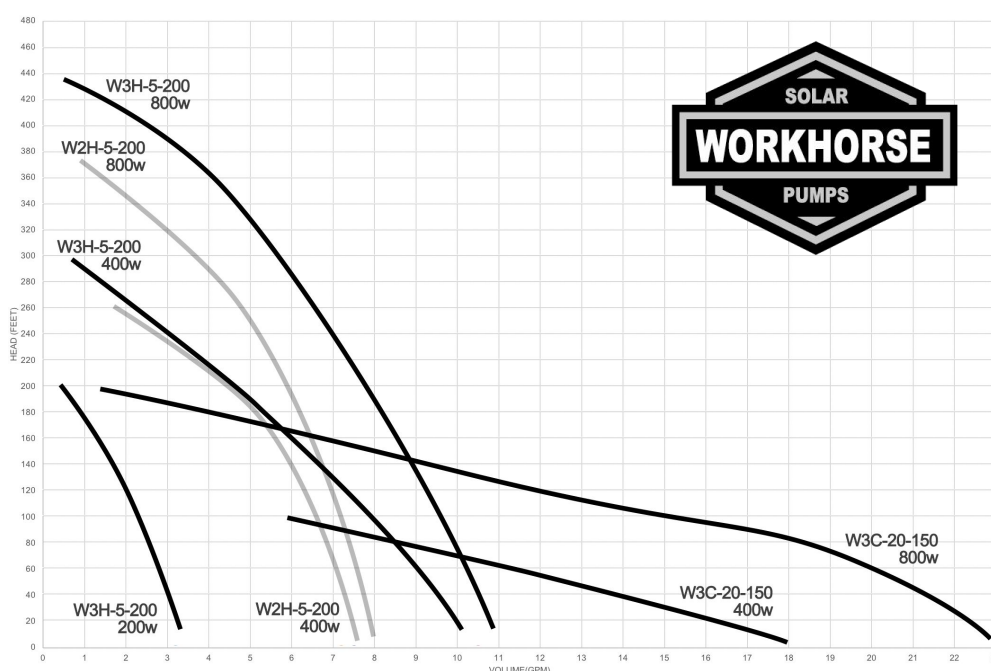
Power Input Range:

200w – 1200w

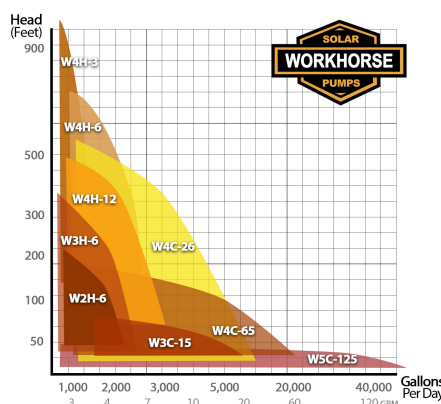
Speed Range: 500 – 4500RPM

Diameter: 2/3 Inch

Protection Class: IP 68



Part of the USA
WORKHORSE
Family of
Solar-Powered
Water Pumps



VOLUME

Well Pumps

W4C-26-600
W4C-65-280
W5C-120-80
W6C-125-60

NARROW

Well Pumps

W2H-5-200
W3H-5-200
W3C-20-150

DEEP WELL

Helical Pumps

W4H-12-450
W4H-6-650
W4H-3-950

SURFACE

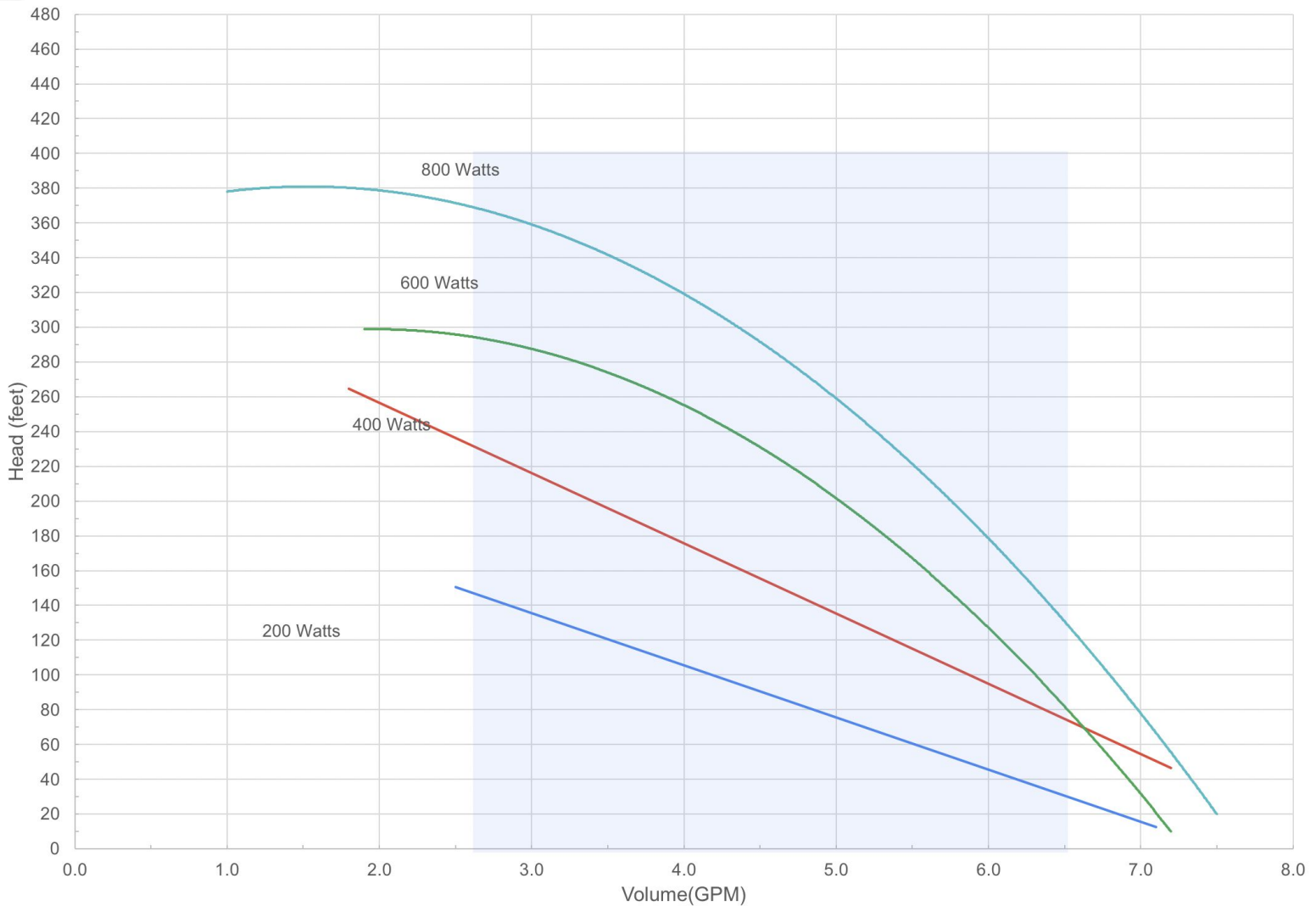
VFD Surface Pumps

TP-750
TP-750 + 24B

W2H-5-200

NARROW SERIES

2 Inch Helical Pump



PSC100 Controller

(Required and included)

Input Voltage:

DC 54 - 72 Vmp *(Prefers higher end of this range)*

Max Voc 90V

Compatible with: 48V Battery Bank

Input Wattage:

Standard 400 - 800w, Max 1200w

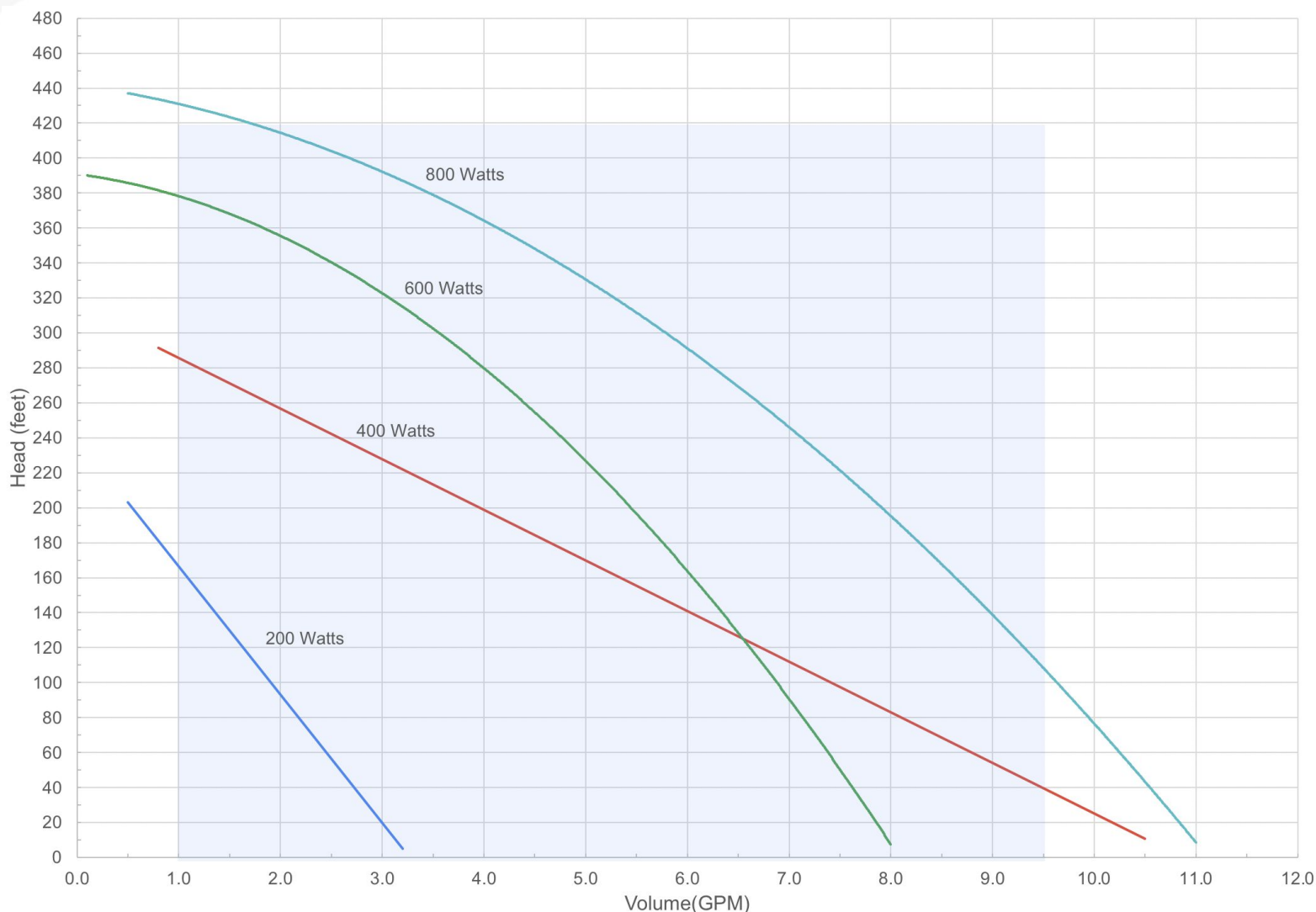
Adding wattage past 800w generally increases daily pumping time, not GPM volume



W3H-5-250

NARROW SERIES

3 Inch Helical Pump



PSC100 Controller (Required and included)

Input Voltage:

DC 36 – 72 Vmp, Max Voc 90V

200w Pump Curve above is measured at 36v Vmp (24v)

Unless 24v Solar array, 48V Battery Bank Recommended

Input Wattage:

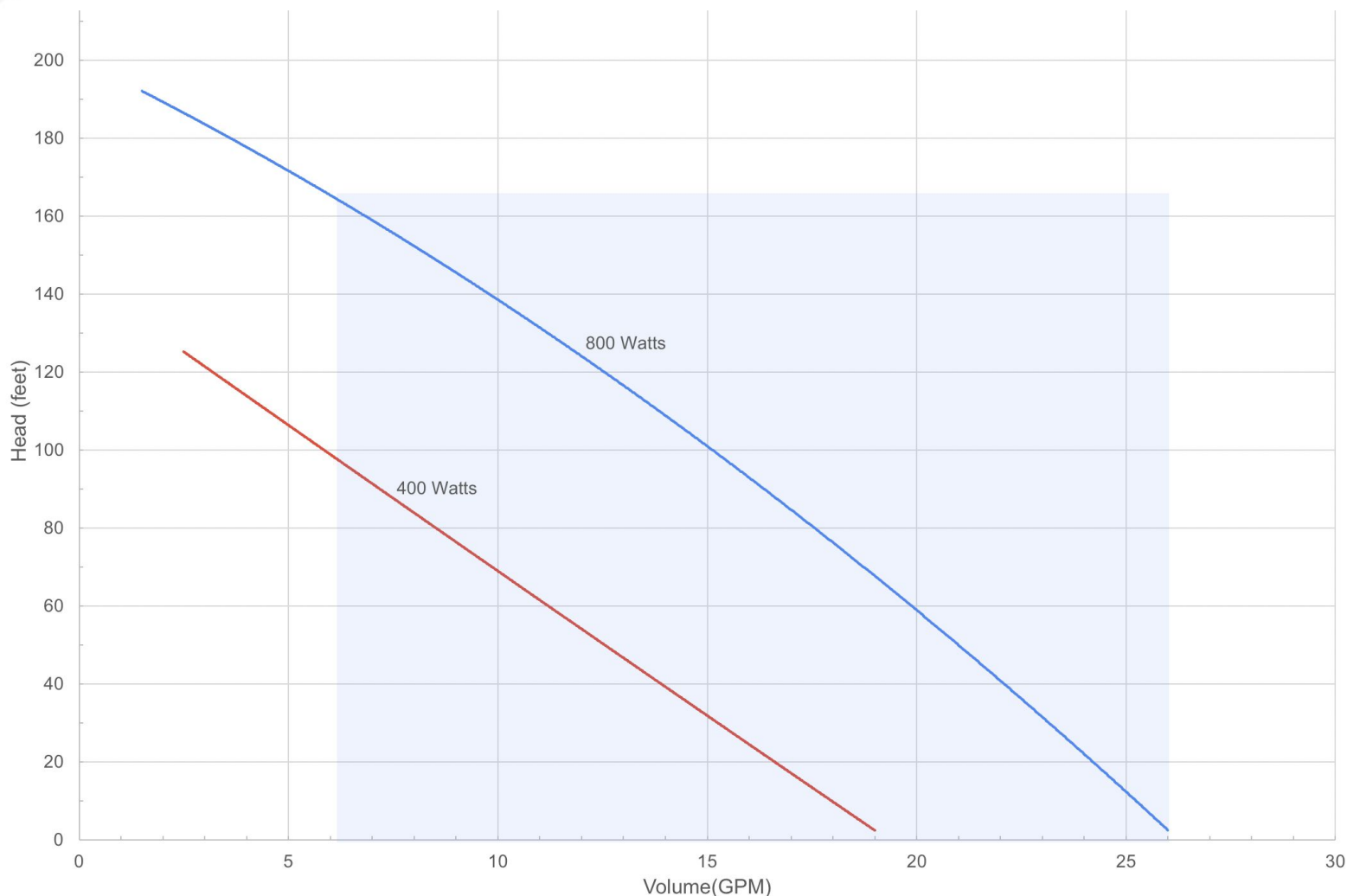
Standard 200 - 800w, Max 1200w

Adding wattage past 800w generally increases daily pumping time, not GPM volume



W3C-20-150 *NARROW SERIES*

3 Inch Centrifugal Pump



PSC100 Controller (Required and included)

Input Voltage:

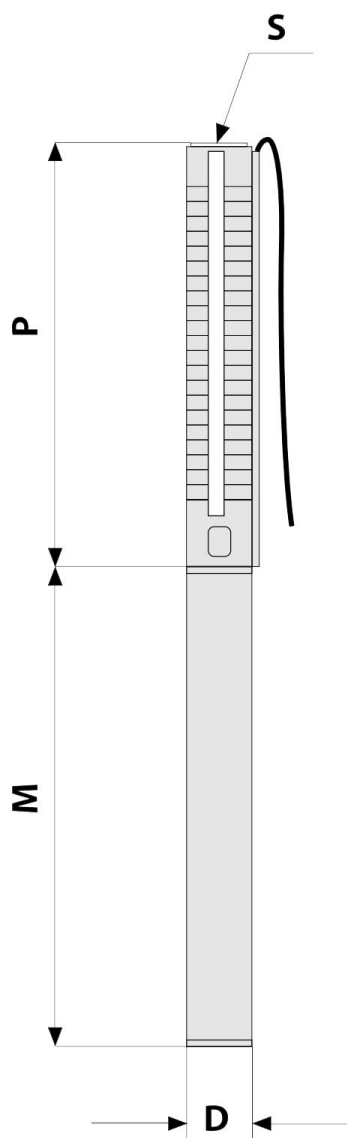
DC 54 - 72 Vmp (Prefers higher end of this range), Max Voc 90V
GPM, Head on Centrifugal Pumps decrease by 50% on batteries, but are compatible with 48V Battery Bank if required

Input Wattage:

Standard 400 - 800w, Max 1200w
Adding wattage past 800w generally increases daily pumping time, not GPM volume



Pump Dimensions

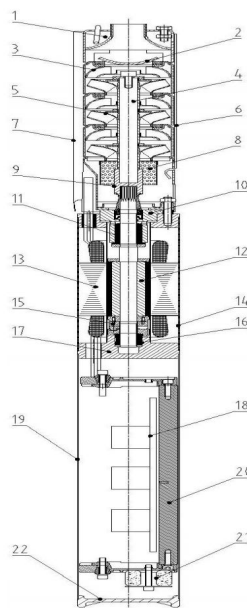


	W3C-20-150	W3H-5-200	W2H-5-200
S	1" FNPT	3/4" FNPT	1/2" FNPT
P	12 1/4"	9"	10"
M	8"	8"	14"
T	20 1/4"	17"	23"
D	3 1/2"	3.01"	2.01"

4" and 5" Diameter Pumps Available too. See W4, W5

PSC100 Controller is 13" x 8" x 6" Deep, 9 lbs

- 1 Discharge chamber *Stainless steel*
- 2 Non-return valve *Stainless steel*
- 3 Guide vanes *PC/Stainless steel*
- 4 Pump Shaft *Stainless steel*
- 5 Impeller *POM/Stainless steel*
- 6 Impeller Fastener *Stainless steel*
- 7 Cable Cover *Stainless steel*
- 8 Pump Inlet *Stainless steel*
- 9 Shaft coupling *Stainless steel*
- 10 Upper Bearing Housing *Stainless*
- 11 Upper Bearing *Silicon Carbide*




- 12 Permanent Magnet Rotor
- 13 Motor Stator
- 14 Pump Housing *Stainless steel*
- 15 Thrust bearing *Graphite*
- 16 Lower Bearing *Silicon Carbide*
- 17 Lower Bearing Housing *Stainless*
- 18 Controller Housing *Stainless steel*
- 19 Controller Housing *Stainless steel*
- 20 Heatsink *Aluminium*
- 21 Inductor
- 22 Base *Stainless steel*

Other Specifications



Power Input	DC 36 – 72VDC, Max Voc 90V
Run Time	Solar: 6-10 hours/day depending on location
Start/Stop	No Limit (soft start built in)
Liquid Characteristics	pH 5 to 9 Maximum temperature 100F Sand Content: <1g/m3 for helical, <50g/m3 for centrifugal
Certifications	CE, TUV
Speed Range	500 – 4500RPM
Diameters	2", 3"
Protection Class	IP 68

		Total Dynamic Head (ft)											
Model	Watts Solar	16	32	49	64	98	128	160	192	262	328	394	TDH
		7	14	21	28	42	55	69	83	114	142	170	PSI
W3C-20-150	400w	15	13	12	8	5	2						
3" Centrifugal	800w	22	20	18	15	12	8	4	2				
W2H-5-200	400w	5	5	4	3	2	1						
2" Helical	800w	6	6	5	5	4	4	3	2				
W3H-5-200	200w	5	5	4	3	2							
3" Helical	400w		8	8	6	5	4	3	2				
	800w		10	10	10	9	9	8	6	4	2	1	

Adding wattage past 800w generally increases daily pumping time, not GPM volume. (Max 1200w) Each system is compatible with 48V Battery Banks when Solar Array is also at Nominal 48V (usually 72Vmp, Max 90Voc)

Learn more at
workhorsepumps.com



Call, Text or Email Us Anytime
with Technical Questions

916-623-4621

support@workhorsepumps.com

