WANNER HYDRA-CELL PRO

SEAL-LESS PUMP TECHNOLOGIES



Versatile, reliable pumps for a wide range of applications.

- Pumps the full spectrum of low-to-high viscosity fluids.
- Features a seal-less design and horizontal disk check valves that enable the pump to handle abrasives and particulates that might damage or destroy other types of pumps.
- Simple, compact design reduces initial investment and lowers maintenance costs.
- Operational efficiencies reduce energy costs.
- Able to run dry without damage (or additional maintenance) to the pump in case of accident or operator error.
- Tolerates non-ideal operating conditions.
- Minimizes maintenance and downtime because there are no mechanical or dynamic seals, packing, or cups to leak, wear, or replace.

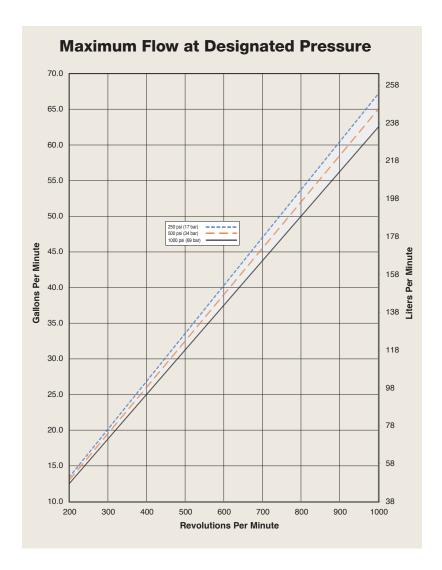


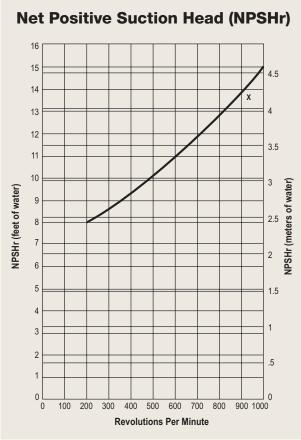
D66 Pro Series | Performance

Capacities

	1 1			Max. Flow Capacities			Max. Inlet Pressure				Max. Discharge Pressure			
	Max. Input		@1000 psi (69 bar)		Metallic Heads		Non-Metallic Heads		Metallic Heads		Non-Metallic Heads			
Model	rpm	gpm	l/min	BPD	psi	bar	psi	bar	psi	bar	psi	bar		
D66-X	1000	62.5	236.6	2142	250	17	50	3.4	1000	69	250	17		

Performance and specification ratings apply to D66 configurations unless specifically noted otherwise.





Suction Lift

Each Hydra-Cell pump has different lift capability depending on model size, cam angle, speed, and fluid characteristics. To ensure that your specific lift characteristics are met, refer to the inlet calculations regarding friction, and acceleration head losses in your Hydra-Cell Product Manual. Compare those calculations to the NPSHr curves above.

Due to the Wanner Engineering Continuous Improvement Program, specifications and other data are subject to change.



D66 Pro Series | Specifications

Model	psi (17 b rpm	gpm	I/min	BPD 2293	
D66-X (Non-metallic)	-				
Flow Capacities @ 500	psi (34 b	ar)			
Model	rpm	gpm	I/min	BPD	
D66-X (Metallic)	1000	65.0	246.1	2228	
Flow Capacities @ 100	0 psi (69	bar)			
Model	rpm	gpm	I/min	BPD	
66-X (Metallic)	1000	62.5	236.6	2142	
Model	yaı	/rev	liters	/IEV	
D66-X (Non-metallic)	0.0	669		253	
	0.0 bar)			253	
D66-X (Non-metallic) Delivery @ 500 psi (34)	0.0 bar) gal	669	0.2	253	
D66-X (Non-metallic) Delivery @ 500 psi (34 Model	0.0 bar) gal , 0.0	669 /rev	0.2	253 s/rev	
D66-X (Non-metallic) Delivery @ 500 psi (34 Model D66-X (Metallic)	0.0 bar) gal , 0.0 bar)	669 /rev	0.2	253 s/rev 246	

Non-metallic Heads: 250 psi (17 bar)

Maximum Inlet Pressure

Metallic Heads: 250 psi (17 bar) Non-metallic Heads: 50 psi (3.4 bar)

Maximum Operating Temperature Metallic Heads:

200°F (93.3°C)

Consult factory for correct component selection for temperatures from 160°F (71°C)

to 200°F (93.3°C).

Non-metallic Heads: 120°F (49°C)

Metallic Heads:

Non-metallic Heads:

Consult factory for temperatures above

120°F (49°C).

Maximum Solids Size 800 microns **Inlet Port** 3 inch NPT (Metallic) 2-1/2 inch SAE J518 Flange (Non-metallic) 3 inch SAE J518 Flange (Metallic) **Discharge Port** 1-1/2 inch NPT 1-1/2 inch SAE **Shaft Diameter** 2 inch (50.8 mm) **Shaft Rotation** Reverse (bi-directional) Tapered roller bearings **Bearings Oil Capacity** 11 US quarts (10.4 liters) Weight

400 lbs. (181 kg)

275 lbs. (125 kg)

Calculating Required Power

$$\frac{100 \times \text{rpm}}{63,000} + \frac{\text{gpm x psi}}{1,460} = \text{electric motor hp}$$

$$\frac{100 \times \text{rpm}}{84,428} + \frac{\text{l/min x bar}}{511} = \text{electric motor kW}$$

Attention!

When using a variable frequency drive (VFD) controller, calculate the hp or kW at minimum and maximum pump speed to ensure the correct hp or kW motor is selected. Note that motor manufacturers typically de-rate the service factor to 1.0 when operating with a VFD.

Calculating Pulley Size

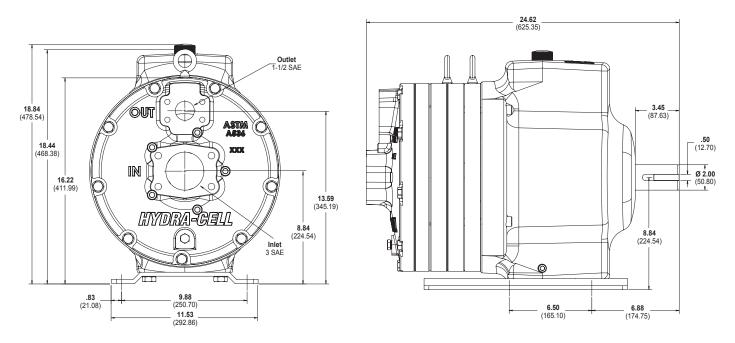
$$\frac{\text{motor pulley OD}}{\text{pump rpm}} = \frac{\text{pump pulley OD}}{\text{motor rpm}}$$

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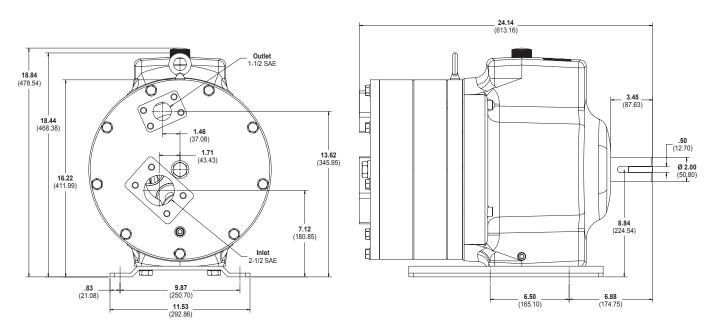
D66 Pro Series | Representative Drawings

D66 Models with SAE Flange Inlet/Outlet Ports Inches (mm)



Metallic pump head models shown.

D66 Models with SAE Flange Inlet/Outlet Ports Inches (mm)



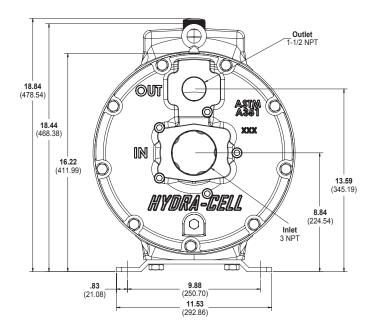
Non-metallic pump head models shown.

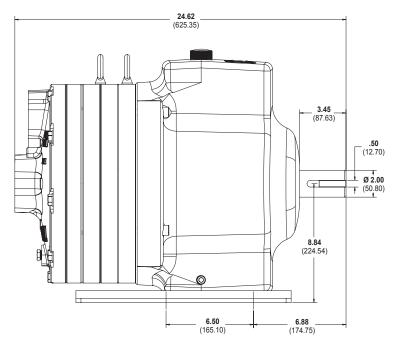
Note: Dimensions are for reference only. Contact factory for certified drawings.



D66 Pro Series | Representative Drawings

D66 Models with NPT Flange Inlet/Outlet Ports Inches (mm)





Metallic pump head models shown.

 $\textbf{Note:} \ \mathsf{Dimensions} \ \mathsf{are} \ \mathsf{for} \ \mathsf{reference} \ \mathsf{only}. \ \mathsf{Contact} \ \mathsf{factory} \ \mathsf{for} \ \mathsf{certified} \ \mathsf{drawings}.$



D66 Pro Series | How to Order

Ordering Information

A complete D66 Pro Series Model Number contains 12 digits including 8 customer-specified design and materials options, for example: D66XKSGHFHMH.

1	2	3	4	5	6	7	8	9	10	11	12
D	6	6	X								

Digit	Order Code	Description
1-4		Pump Configuration
	D66	Shaft-driven
5	X	Hydraulic End Cam Max. 62.5 gpm (236.6 l/min) 2142 BPD @ 1000 rpm
6		Pump Head Material
	В	Brass
	С	Ductile Iron (Nickel-plated)
	G	Duplex Alloy 2205 Stainless Steel (with
	N	Hastelloy C followers & follower screws) Polypropylene (with Hastelloy C followers and follower screws) - SAE only
	Р	Polypropylene (with Hastelloy C followers and follower screws) - SAE only
	S	316L Stainless Steel
7		Diaphragm & O-ring Material
	Ε	EPDM (used with metallic heads only)
	R	EPDM (used with non-metallic heads only)
	G	FKM (used with metallic heads only)
	Н	FKM (used with non-metallic heads only)
	T	Buna-N (used with metallic heads only)
	U	Buna-N (used with non-metallic heads only)
8		Valve Seat Material
	Н	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
9		Valve Material
	F	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
10		Valve Springs
	Е	Elgiloy
	F	17-4 Stainless Steel
	T	Hastelloy C

Digit	Order Code	Description
11		Valve Spring Retainers
	T	Celcon
	M	PVDF
12		Hydra-Oil
	С	EPDM-compatible oil
	Н	15W50 high-temp severe-duty synthetic oil

D66 Pro Series | Options

Consult the Hydra-Cell Master Catalog for:

- Motors, bases, couplings and other pump accessories
- Hydra-Oil selection and specification information
- Design considerations, installation guidelines, and other technical assistance in pump selection



D66 Pro with Brass pump head and threaded ports.



D66 Pro with Brass pump head and SAE flanged ports



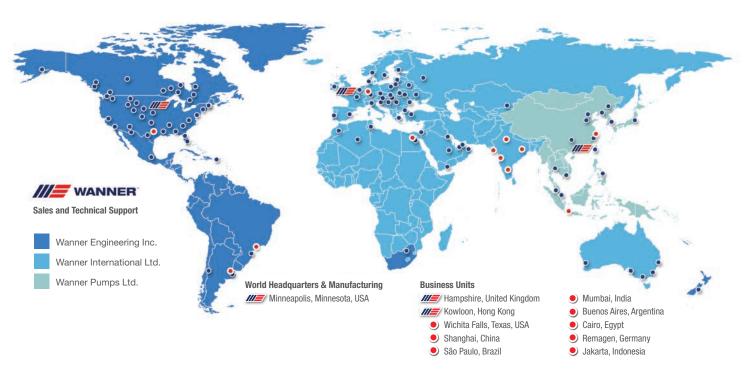
D66 Pro with Stainless Steel pump head



D66 Pro with Polypropylene pump head



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Wanner worldwide

GLOBAL SALES & TECHNICAL SUPPORT

WANNER ENGINEERING, INC.™ **WORLD HEADQUARTERS &**

MANUFACTURING

Minneapolis, Minnesota USA t: 612-332-5681 e: sales@wannereng.com Hydra-Cell.com

REGIONAL OFFICE

Wichita Falls, Texas USA t: 940-322-7111 e: sales@wannereng.com

LATIN AMERICAN OFFICE

São Paulo, Brazil t: +55 (11) 99582-1969 e: mmagoni@wannereng.com Hydra-Cell-Pumps.com.br

WANNER INTERNATIONAL, LTD.™

UNITED KINGDOM

8 & 9 Fleet Business Park Sandy Lane • Church Crookham Hampshire UK GU52 8BF

t: +44 (0) 1252 816847 e: support@wannerint.com Hydra-Cell.co.uk

WANNER PUMPS, LTD.™

Kowloon, HONG KONG t: +852 3428 6534 e: sales@wannerpumps.com WannerPumps.com

Shanghai, CHINA t: +86-21-6876 3700 e: sales@wannerpumps.com WannerPumps.com

