

Q330 PRO SERIES HIGH PRESSURE

Maximum Flow Rate: 446 l/min (118 US gpm) 4045 BPD
Maximum Pressure: 310 bar (4500 psi)

WANNER™ HYDRA-CELL® PRO
SEAL-LESS PUMP TECHNOLOGIES



AVAILABLE
TO MEET

API
674

UK
CA CE

Q330 Series with Nickel
Aluminum Bronze pump head.

A higher standard of pump performance and energy efficiency.

- Integrates **Wanner Hydra-Cell® Pro** seal-less pump technologies for the highest levels of volumetric and energy efficiencies across a full rpm range.
- Patented ADPC (Advanced Diaphragm Position Control) and hydraulic oil management systems protect diaphragms under closed or restricted inlet conditions.
- Can run dry indefinitely without damage to the pump, eliminating downtime and repair costs.
- Pumped liquid is 100% contained, eliminating environmental risks, ground contamination and volatile emissions.
- Seal-less design eliminates leaks, hazards and costs associated with seals and plunger packing.
- Exceeds API 675 standards for accuracy, linearity and repeatability.
- Wider range and higher inlet pressures to 34 barg.
- Self-priming – eliminates need for charge pumps.
- Unique diaphragm design reliably handles a wide range of viscosities and shear sensitivities, corrosive liquids, abrasives, slurries and suspended solids.
- Lower total cost of ownership in acquisition, operation, service, maintenance, and energy use.

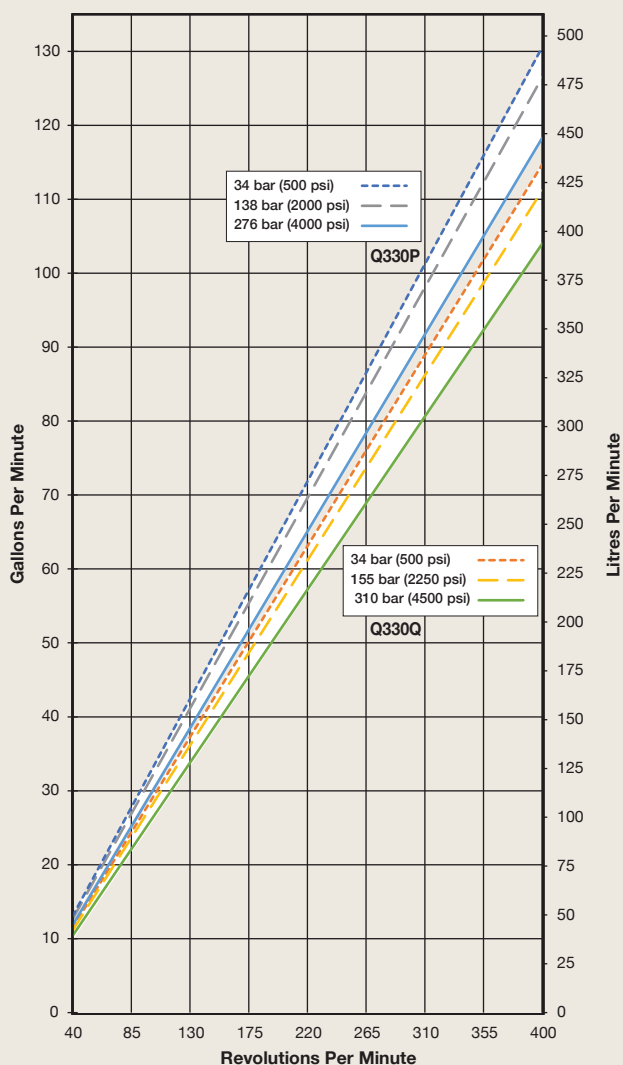
Q330 Pro High Pressure | Performance

Capacities

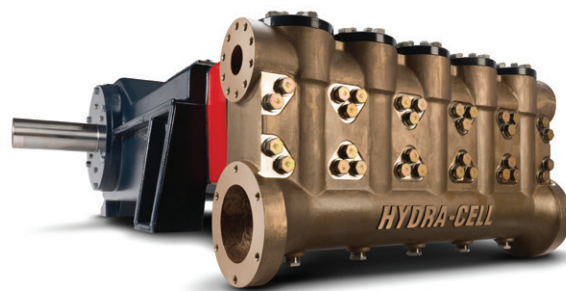
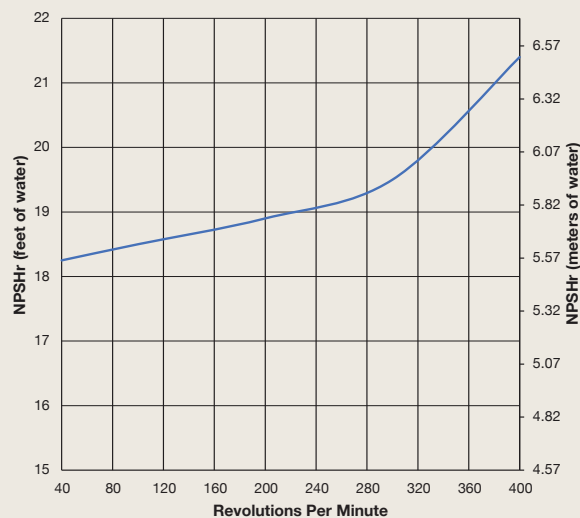
Model	Max. Input rpm	Plunger Dia. mm inches	Max. Flow Capacities			Max. Pressure Ratings			
						Discharge		Inlet	
			US gpm	l/min	BPD	bar	psi	bar	psi
Q330P	400	51 2.000	118	446	4045	276	4000	34	500
Q330Q	400	48 1.875	104	393	3566	310	4500	34	500

Consult factory when operating below 40 rpm

Maximum Flow at Designated Pressure



Net Positive Suction Head (NPSHr)



Q330 Series pumps feature the Hydra-Cell seal-less design, eliminating clean-up costs from leaking seals or packing and protecting operators from dangerous fluids such as those containing hydrogen sulfide.

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

Q330 Pro High Pressure | Specifications

Flow Capacities

Model	Pressure bar (psi)	rpm	US gpm	l/min	BPD
Q330P	278 (4000)	400	118	446	4045
Q330Q	310 (4500)	400	104	393	3566

Delivery

	Pressure bar (psi)	gal/rev	litres/rev
Q330P	34 (500)	0.325	1.230
	138 (2000)	0.310	1.172
	278 (4000)	0.293	1.109
Q330Q	34 (500)	0.286	1.083
	155 (2250)	0.276	1.046
	310 (4500)	0.260	0.983

rpm

Maximum:	400
Minimum:	40

Consult factory for speeds less than 40 rpm.

Maximum Discharge Pressure

Metallic Heads:	Q330P 276 bar (4000 psi)
	Q330Q 310 bar (4500 psi)

Maximum Inlet Pressure 34 bar (500 psi)

Operating Temperature

Maximum:	82.2°C (180°F)
Minimum:	4.4°C (40°F)

Consult factory for temperatures outside of these ranges

Maximum Solids Size 800 microns

Input Shaft Right Side

Inlet Ports Weld-On: 6 inch / SCH. 40 6 inch NPT, 6 inch Class 300 RF ANSI

Discharge Ports Weld-On: 3 inch / SCH. XXH 3 inch NPT, 3 inch Class 2500 RTJ ANSI

Plunger Stroke Length 127 mm (5 inch)

Shaft Diameter 101.6 mm (4 inch))

Shaft Rotation Uni-directional (See rotation arrow.)

Oil Capacity 104.1 litres (110 US quarts)

Weight

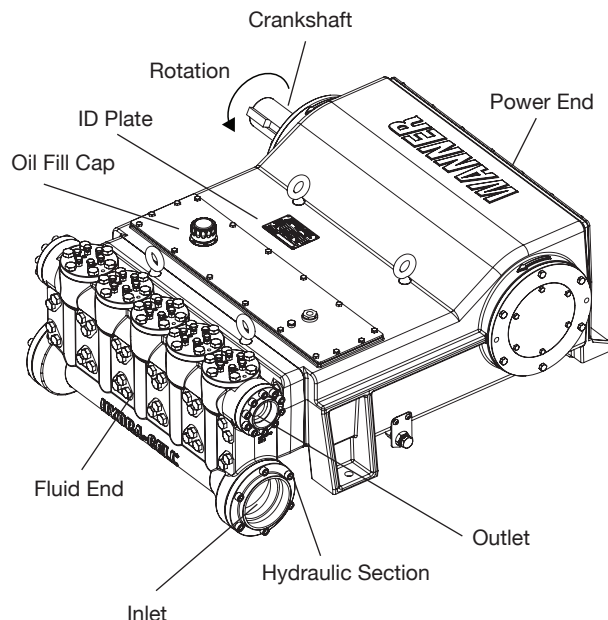
Metallic Heads:	2268 kg (5000 lbs.)
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Fluid End Materials

Manifold:	Nickel Aluminum Bronze (NAB)
Diaphragm/Elastomers:	FKM Buna-N
Diaphragm Follower Screw:	316 Stainless Steel Duplex Alloy 2205 Stainless Steel Hastelloy C
Valve Spring Retainer:	Hastelloy C
Check Valve Spring:	Elgiloy Hastelloy C
Valve Disc/Seat:	17-4 Stainless Steel Nitronic 50 Hastelloy C
Inlet/Outlet Valve Retainer:	316 Stainless Steel Duplex Alloy 2205 Stainless Steel Hastelloy C

Power End Materials

Crankshaft:	Ductile Iron
Connecting Rods:	Ductile Iron
Crossheads:	Ductile Iron
Crankcase:	Ductile Iron
Bearings:	Spherical Roller Journal (outer mains) Steel Backed Tri-metal (crankpin) Bronze (wristpin, centre mains)



Calculating Required Horsepower (kW)*

$$\frac{\text{US gpm} \times \text{psi}}{1,460} = \text{electric motor hp}^*$$

$$\frac{\text{lpm} \times \text{bar}}{511} = \text{electric motor kW}^*$$

* hp (kW) is required application power.

Attention!

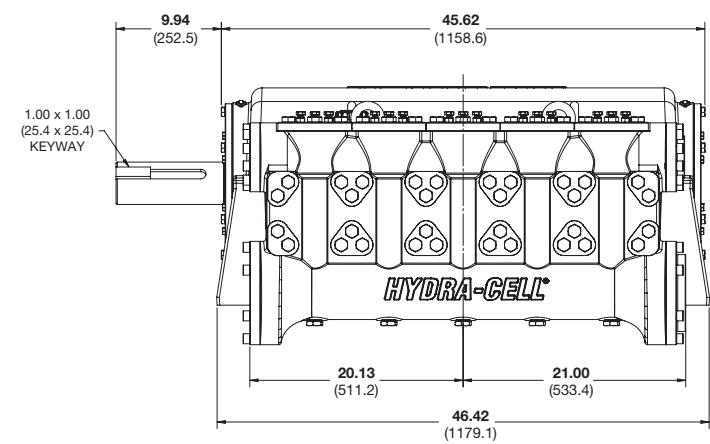
When sizing motors with variable speed drives (VFD): It is very important to select a motor and a VFD rated for constant torque inverter duty service and that the motor is rated to meet the torque requirements of the pump throughout desired speed range.

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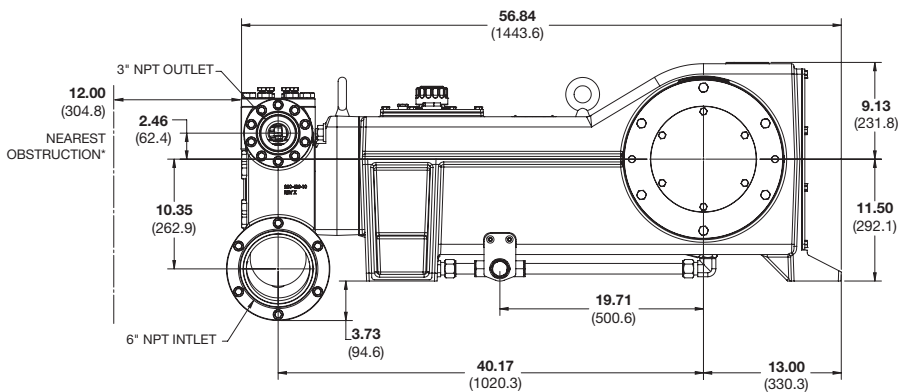
Q330 Pro High Pressure | Representative Drawings

Threaded Version inches (mm)

Front View

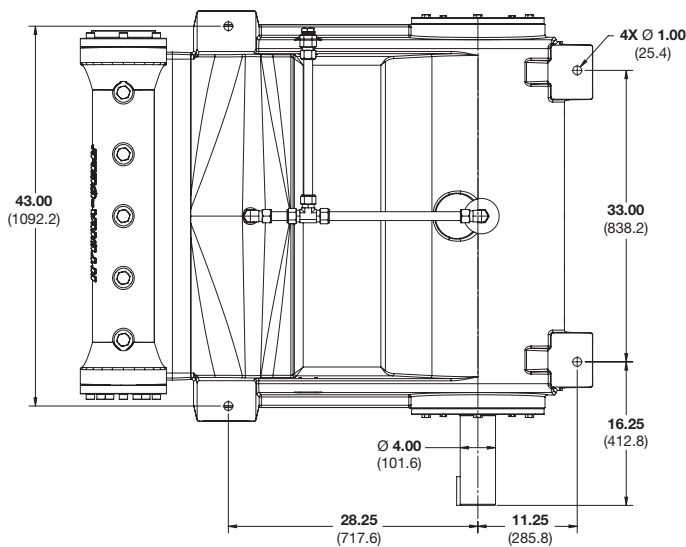


Side View



*Contact factory for obstruction distances closer than 12 inches (304.8 mm).

Bottom View



Note: Dimensions are for reference only. Contact Wanner International for certified drawings.

Q330 Pro High Pressure | How to Order

Ordering Information

A complete Q330 Series High Pressure Model Number contains 14 digits including 8 customer-specified design and materials options, for example: Q330QRDGTTTTA.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Q	3	3	0			D					T		

Q330 High Pressure

Digit	Order Code	Description
1-4	Q330	Pump Configuration Shaft-driven
5	P	Performance Max. 446 l/min (118 US gpm) 4045 BPD @ 276 bar (4000 psi)
	Q	Max. 393 l/min (104 US gpm) 3566 BPD @ 310 bar (4500 psi)
6	A	Pump Head Version NPT Ports (Steel)
	C	Weld Neck (Steel)
	D	Weld Neck (316L Stainless Steel)
	E	Weld Neck (Hastelloy C)
	F	Weld Neck (Duplex Alloy 2205 Stainless Steel))
	G	ANSI Flanged Ports (Duplex Stainless Steel))
	T	ANSI Flanged Ports (Hastelloy)
7	D	Pump Head Material Nickel Aluminium Bronze (NAB)
8	G	Diaphragm & O-ring Material FKM
	T	Buna-N
9	D	Valve Seat Material Tungsten Carbide*
	H	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
10	D	Valve Material Tungsten Carbide*
	F	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
11	D	Valve Springs Elgiloy for Tungsten Carbide valves*
	E	Elgiloy
	T	Hastelloy C
12	T	Valve Spring Retainers / Valve Guide Hastelloy C / PVDF

Digit	Order Code	Description
13	A	Hydra-Oil 10W30 standard-duty oil
	B	40-wt. oil
	H	15W50 high-temp severe-duty synthetic oil
14	C	Oil Level Monitor Cover Float Switch, normally closed (recommended)
	O	Float Switch, normally open
	S	Float switch, Class I, Div. 1, Groups A, B, C, D, normally closed
	T	Float switch, Class I, Div. 1, Groups A, B, C, D, normally open

* Tungsten Carbide valve seat and disc are a matched set and must be purchased together along with appropriate valve springs.



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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

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

WANNER INDIA PVT. LTD.

Mumbai, INDIA

t: +91 (22) 22044766
e: support@wannerindia.com
WannerIndia.com

