

T200 PRO SERIES HIGH PRESSURE

Maximum Flow Rate: 72 gpm (272 l/min) 2469 BPD
Maximum Pressure: 4500 psi (310 bar)

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

AVAILABLE
TO MEET
 API
674



UK
CA CE

*T200 Pro Series High Pressure model with
Nickel Aluminum Bronze (NAB) pump head.*

A higher standard of pump performance and energy efficiency.

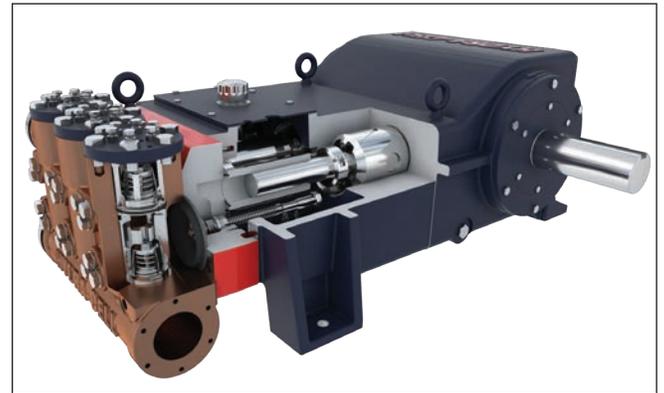
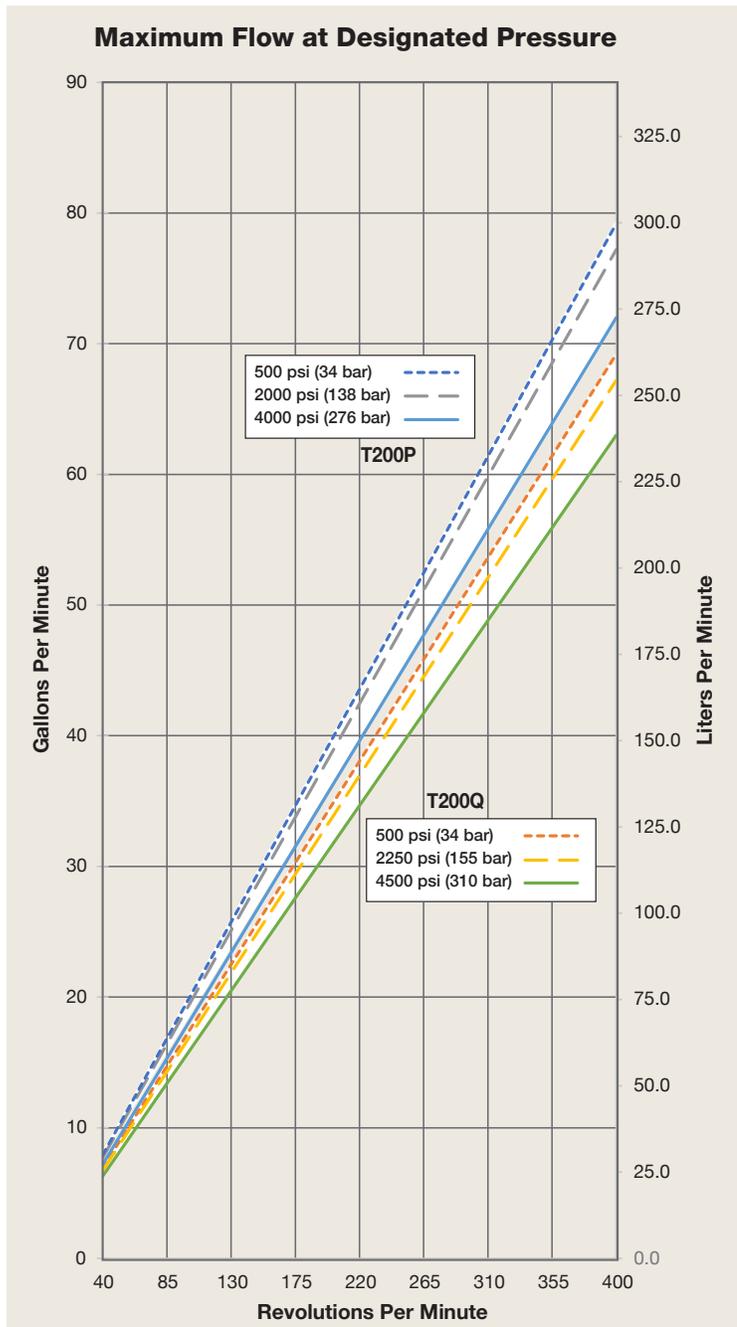
- Integrates **Wanner Hydra-Cell® Pro** seal-less pump technologies for the highest levels of volumetric and energy efficiencies across a full rpm range.
- Patented ADPC (Advanced Diaphragm Position Control) and hydraulic oil management system protect diaphragms under closed or restricted inlet conditions.
- Can run dry indefinitely without damage to the pump.
- Pumped fluid is 100% contained – zero environmental impact, no ground contamination, no volatile emissions.
- Seal-less design eliminates leaks, hazards, and the expense associated with seals and plunger packing.
- Exceeds API 675 standards for accuracy, linearity, and repeatability.
- Reliably handles a wide range of viscosities and shear sensitivities, corrosive fluids, abrasives, slurries and particulates.
- Reduced ownership costs – acquisition, operation, service, maintenance and energy use.

T200 Pro High Pressure | Performance

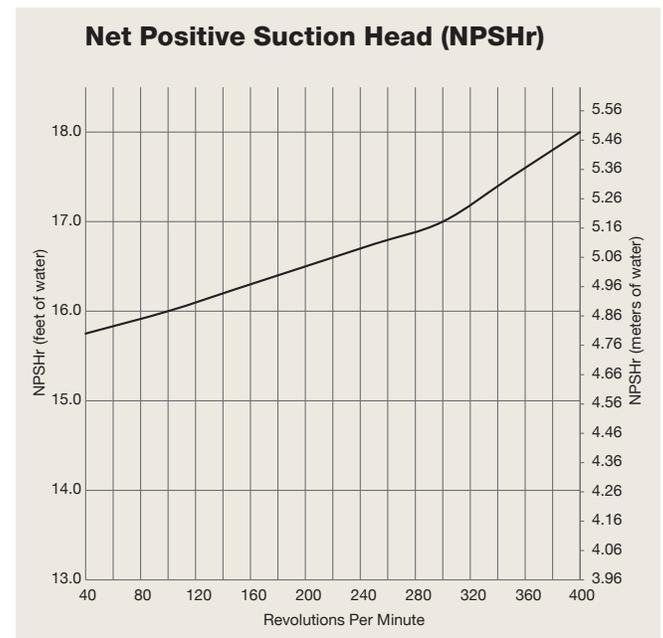
Capacities

Model	Max. Input rpm	Plunger Dia.		Max. Flow Capacities			Max. Pressure Ratings				
		inches	mm	gpm	l/min	BPD	Discharge		Inlet		
				psi	bar	psi	bar	psi	bar	psi	bar
T200P	400	2.000	51	72	272	2469	4000	276	500	34	
T200Q	400	1.875	48	63	238	2160	4500	310	500	34	

Consult factory when operating below 40 rpm



T200 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.

T200 Pro High Pressure | Specifications

Flow Capacities

Model	Pressure psi (bar)	rpm	gpm	l/min	BPD
T200P	4000 (276)	400	72	272	2469
T200Q	4500 (310)	400	63	238	2160

Delivery

	Pressure psi (bar)	gal/rev	liters/rev
T200P	500 (34)	0.198	0.749
	2000 (138)	0.193	0.731
	4000 (276)	0.180	0.681
T200Q	500 (34)	0.173	0.655
	2250 (155)	0.168	0.636
	4500 (310)	0.158	0.596

rpm

Maximum: 400

Minimum: 40

Consult factory for speeds less than 40 rpm.

Maximum Discharge Pressure

Metallic Heads:	T200P	4000 psi (276 bar)
	T200Q	4500 psi (310 bar)

Maximum Inlet Pressure 500 psi (34 bar)

Operating Temperature

Maximum: 180°F (82.2°C)

Minimum: 40°F (4.4°C)

Consult factory for temperatures outside this range.

Maximum Solids Size 800 microns

Input Shaft Right Side

Inlet Ports Weld-On: 4" / SCH. 40 4" NPT, 4" Class 300 RF ANSI Flange

Discharge Ports Weld-On: 2" / SCH. 160 2" NPT, 2" Class 2500 RTJ ANSI Flange

Plunger Stroke Length 5 inch (127 mm)

Shaft Diameter 4 inch (101.6 mm)

Shaft Rotation Uni-directional (See rotation arrow.)

Calculating Required Horsepower (kW)*

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

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

* hp (kW) is required application power.

Attention!

When sizing motors with variable frequency 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.

Oil Capacity

80 US quarts (75.7 liters) - blank back cover
See page 5 for oil selection and specification.

Pump Weight

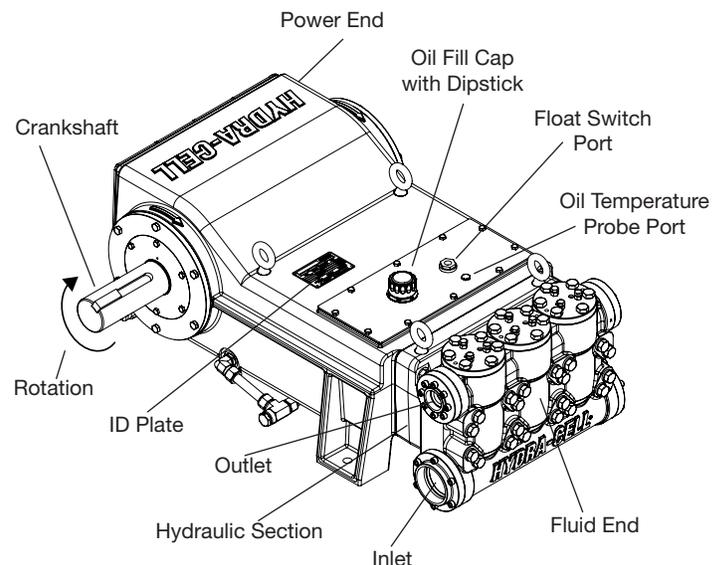
3000 lbs. (1361 kg)

Fluid End Materials

Manifold:	Nickel Aluminum Bronze (NAB) Duplex Alloy 2205 Stainless Steel CF3M (316L) Stainless Steel Hastelloy CX2MW
Diaphragm/Elastomers:	FKM Buna-N
Diaphragm Follower Screw:	316 Stainless Steel Duplex Alloy 2205 Stainless Steel Hastelloy C
Valve Spring Retainer/Guide:	Hastelloy C / PVDF
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:	Forged Q&T Alloy Steel
Connecting Rods:	Ductile Iron
Crossheads:	Ductile Iron
Crankcase:	Ductile Iron
Bearings:	Spherical Roller (main) Steel-backed Tri-metal (crankpin) Bronze (wristpin)

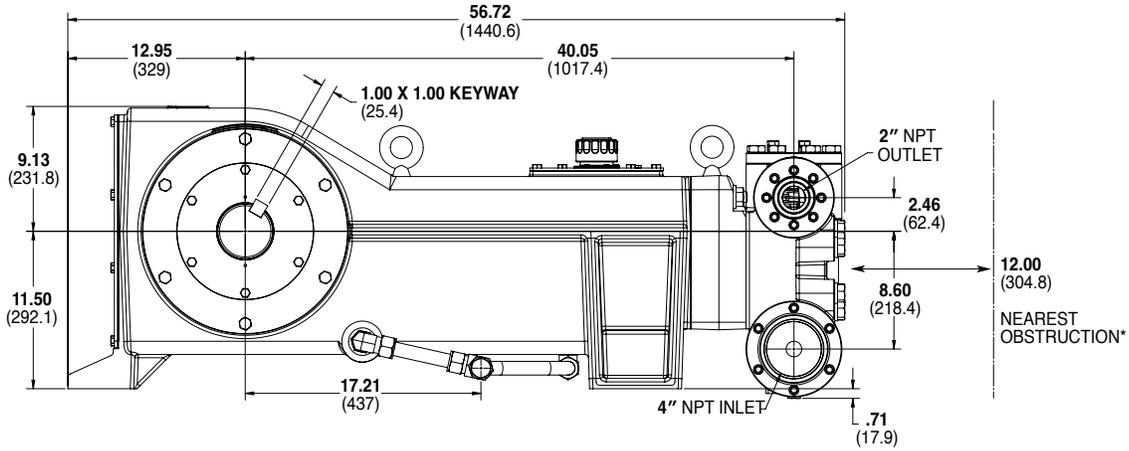


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T200 Pro High Pressure | Drawings

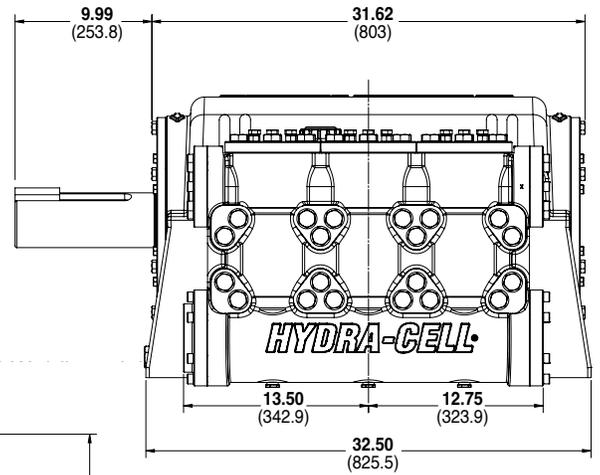
Threaded Version inches (mm)

Side View

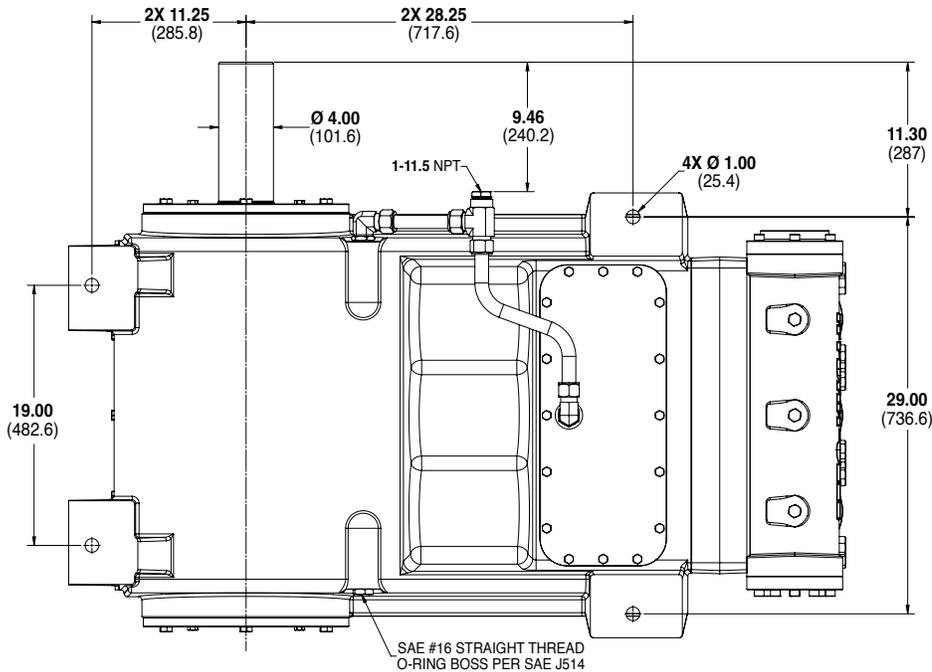


*Contact factory for obstruction distances closer than 12 inches (304.8 mm).

Front View



Bottom View



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

T200 Pro High Pressure | How to Order

Ordering Information

A complete T200 Pro Series High Pressure Model Number contains 14 digits including 9 customer-specified design and materials options, for example: T200PADTHFETAC.

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

High Pressure

Digit	Order Code	Description
1-4	T200	Pump Configuration Shaft-driven
5		Performance
	P	Max. 72 gpm (272 l/min) 2469 BPD @ 4000 psi (276 bar)
	Q	Max. 63 gpm (238 l/min) 2160 BPD @ 4500 psi (310 bar)
6		Pump Head Version
	A	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 Alloy 2205 Stainless Steel
	T	ANSI Flanged Ports, Hastelloy C
7		Pump Head Material
	D	Nickel Aluminum Bronze (NAB)
	G	Duplex Alloy 2205 Stainless Steel
	S	CF3M (316L) Stainless Steel
	T	Hastelloy CX2M
8		Diaphragm & O-ring Material
	G	FKM
	T	Buna-N
9		Valve Seat Material
	D	Tungsten Carbide*
	H	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
10		Valve Material
	D	Tungsten Carbide*
	F	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C

Digit	Order Code	Description
11		Valve Springs
	D	Elgiloy for Tungsten Carbide valves*
	E	Elgiloy
	T	Hastelloy C
12		Valve Spring Retainers / Valve Guide
	T	Hastelloy C / PVDF
13		Hydra-Oil
	A	10W30 standard-duty oil
	B	40-wt. oil
	H	15W50 high-temp severe-duty synthetic oil
14		Oil Level Monitoring
	C	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
	Y	No switch, flat back cover



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

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