

T200 PRO SERIES LOW PRESSURE

Maximum Flow Rate: 764 l/min (202 US gpm) 6925 BPD
Maximum Pressure: 138 bar (2000 psi)

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

AVAILABLE
TO MEET

API
674



UK
CA CE

*T200 Series low-pressure
model 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.

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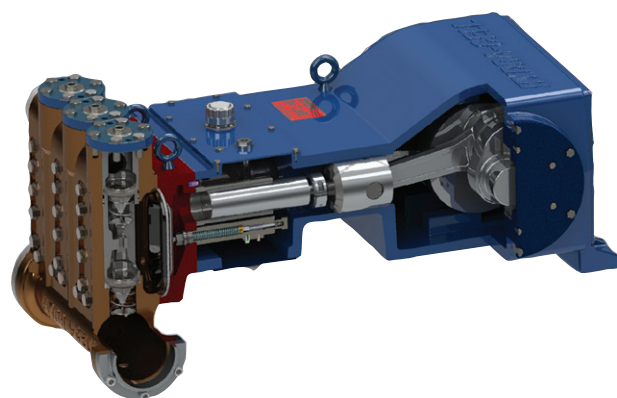
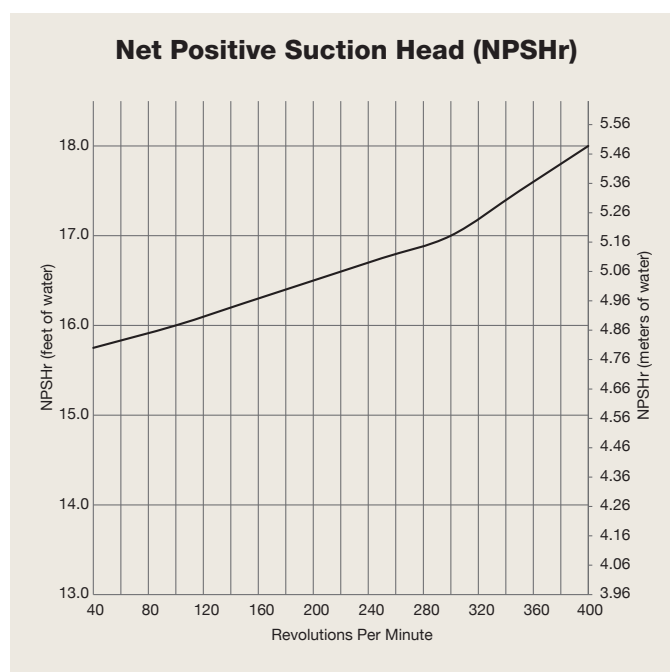
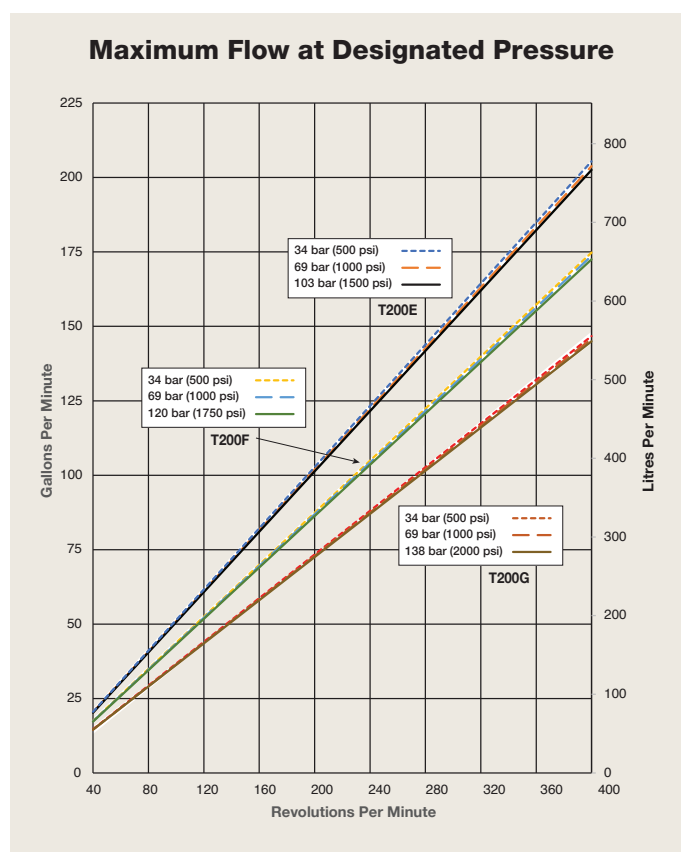
HYDRA-CELL.CO.UK

T200 Pro Low Pressure | Performance

Capacities

Model	Max. Input rpm	Plunger Dia. inches mm		Max. Flow Capacities US gpm l/min BPD			Max. Pressure Ratings			
							Discharge		Inlet	
							bar	psi	bar	psi
T200E	400	2.250	57	202	764	6925	103	1500	34	500
T200F	400	2.125	54	172	651	5896	120	1750	34	500
T200G	400	2.125	54	145	548	4971	138	2000	34	500

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.

Note: Each pump complies with item 6.8.2 of API 674 across the full performance range.

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

T200 Pro Low Pressure | Specifications

Flow Capacities

Model	Pressure bar (psi)	rpm	US gpm	l/min	BPD
T200E	103(1500)	400	202	764	6925
T200F	120 (1750)	400	172	651	5896
T200G	138 (2000)	400	145	548	4971

Delivery

	Pressure bar (psi)	gal/rev	litres/rev
T200E	34 (500)	0.514	1.94
	69 (1000)	0.510	1.93
	103 (1500)	0.506	1.92
T200F	34 (500)	0.437	1.65
	69 (1000)	0.434	1.64
	120 (1750)	0.431	1.63
T200G	34 (500)	0.367	1.39
	69 (1000)	0.365	1.38
	138 (2000)	0.363	1.37

rpm

Maximum:	400
Minimum:	40

Consult factory for speeds less than 40 rpm.

Maximum Discharge Pressure

Metallic Heads:	T200E 103 bar (1500 psi)
	T200F 120 bar (1750 psi)
	T200G 138 bar (2000 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 this range.

Maximum Solids Size 800 microns

Input Shaft Right Side (left side available on request)

Inlet Ports Weld-On: 6" / SCH. 40 6" NPT, 6" Class 300 RTJ ANSI Flange

Discharge Ports Weld-On: 3" / SCH. 80 3" NPT, 3" Class 2500 RTJ ANSI Flange

Plunger Stroke Length 127 mm (5 Inch)

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.

Shaft Diameter 101.6 mm (4 inch)

Shaft Rotation Uni-directional (See rotation arrow.)

Oil Capacity 75.7 litres (80 US quarts) See page 5 for oil selection and specification.

Weight

Metallic Heads: 1588 kg (3500 lbs.)

Fluid End Materials

Manifold: Nickel Aluminum Bronze (NAB)
Duplex Alloy 2205 Stainless Steel
CF3M (316L) Stainless Steel
Hastelloy CX2MW

Diaphragm/Elastomers: Aflas
FKM
Buna-N

Diaphragm Follower Screw: 316 Stainless Steel
Duplex Alloy 2205 Stainless Steel
Hastelloy C

Valve Spring Retainer: Nitronic 50
Hastelloy C

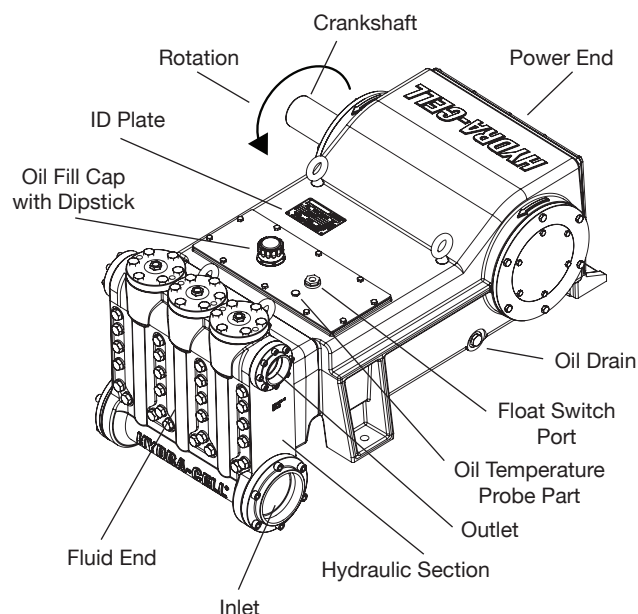
Check Valve Spring: Elgiloy
Hastelloy C

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: 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)

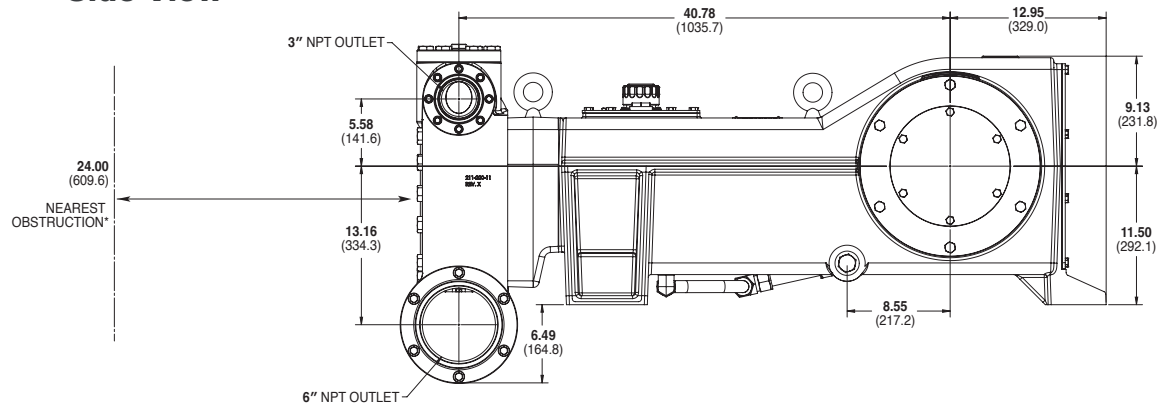


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T200 Pro Low Pressure | Representative Drawings

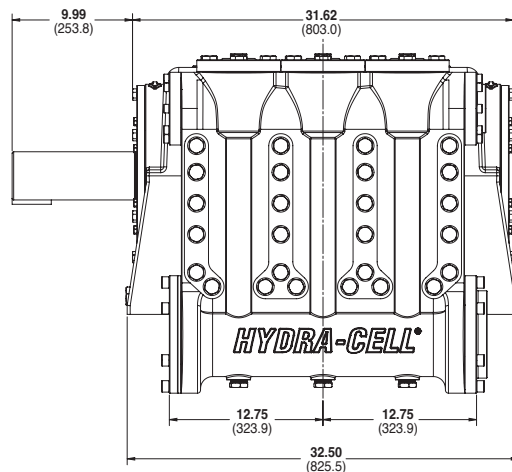
Threaded Version inches (mm)

Side View

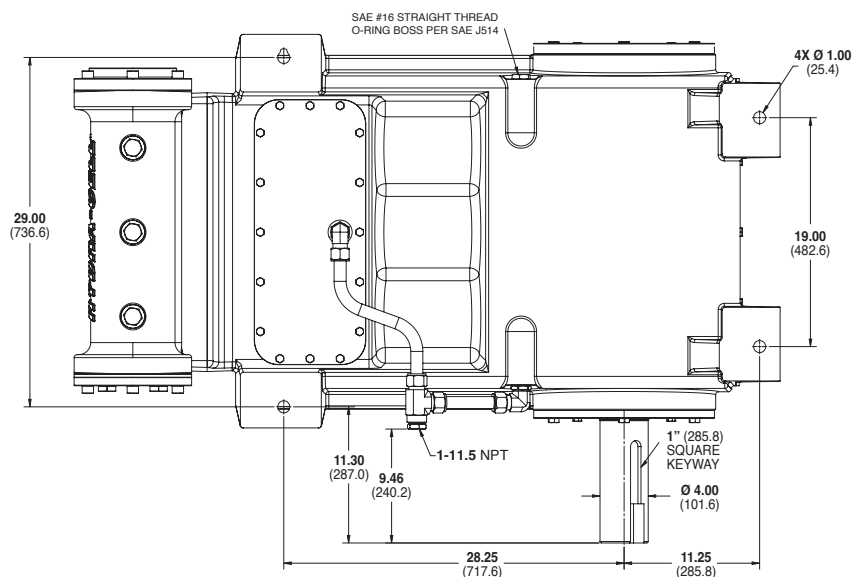


*Contact factory for obstruction distances closer than 24 inches (609.6 mm)

Front View



Bottom View



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

T200 Pro Low Pressure | How to Order

Ordering Information

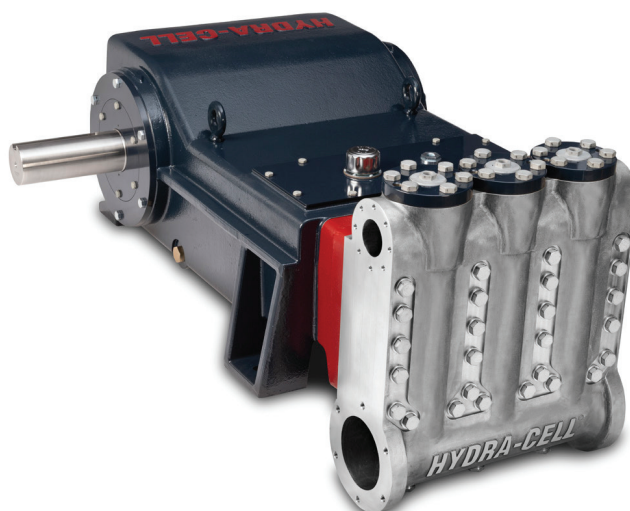
A complete T200 Series Low Pressure Model Number contains 14 digits including 9 customer-specified design and material options, for example, T200ERDGHFETAC.

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

T200 Low Pressure

Digit	Order Code	Description
1-4	T200	Pump Configuration Shaft-driven
5		Performance
	E	Max. 764 l/min (202 US gpm) 6925 BPD @ 103 bar (1500 psi)
	F	Max. 651 l/min (172 US gpm) 5896 BPD @ 120 bar (1750 psi)
	G	Max. 548 l/min (145 US gpm) 4971 BPD @ 138 bar (2000 psi)
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 Flange Ports (Duplex Alloy 2205 Stainless Steel)
	T	ANSI Flange Ports (Hastelloy C)
7		Pump Head Material
	D	Nickel Aluminium Bronze (NAB)
	G	Duplex Alloy 2205 Stainless Steel
	S	CF3M (316L) Stainless Steel
	T	Hastelloy CX2MW
8		Diaphragm & O-ring Material
	A	Aflas
	G	FKM
	T	Buna-N
9		Valve Seat Material
	H	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
10		Valve Material
	F	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
11		Valve Springs
	E	Elgiloy
	T	Hastelloy C

Digit	Order Code	Description
12		Valve Spring Retainers / Valve Guide
	N	Nitronic 50 / PVDF
	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



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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

