

T200 Series Medium Pressure Models T200K & T200M

Maximum Flow Rate: 93 gpm (352 l/min) 3189 BPD

Maximum Pressure: 3500 psi (241 bar)

Hydra-Cell[®]
Seal-less Pumps



T200 Series medium-pressure model with
Nickel Aluminum Bronze pump head.

**Available
to Meet
API 674!**

- Seal-less design eliminates leaks, hazards and the expense associated with seals and packing.
- Low NPSH requirements allow for operation with a vacuum condition on the suction - positive suction pressure is not necessary.
- Can operate with a closed or blocked suction line and run dry indefinitely without damage, eliminating downtime and repair costs.
- Unique diaphragm design handles more abrasives with less wear than gear, screw or plunger pumps.
- Hydraulically balanced diaphragms to handle high pressures with low stress.
- Lower energy costs than centrifugal pumps.
- Rugged construction for long life with minimal maintenance.
- Compact design offers a variety of installation options.

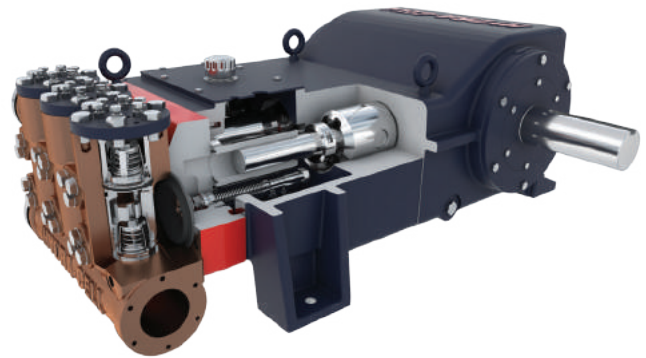
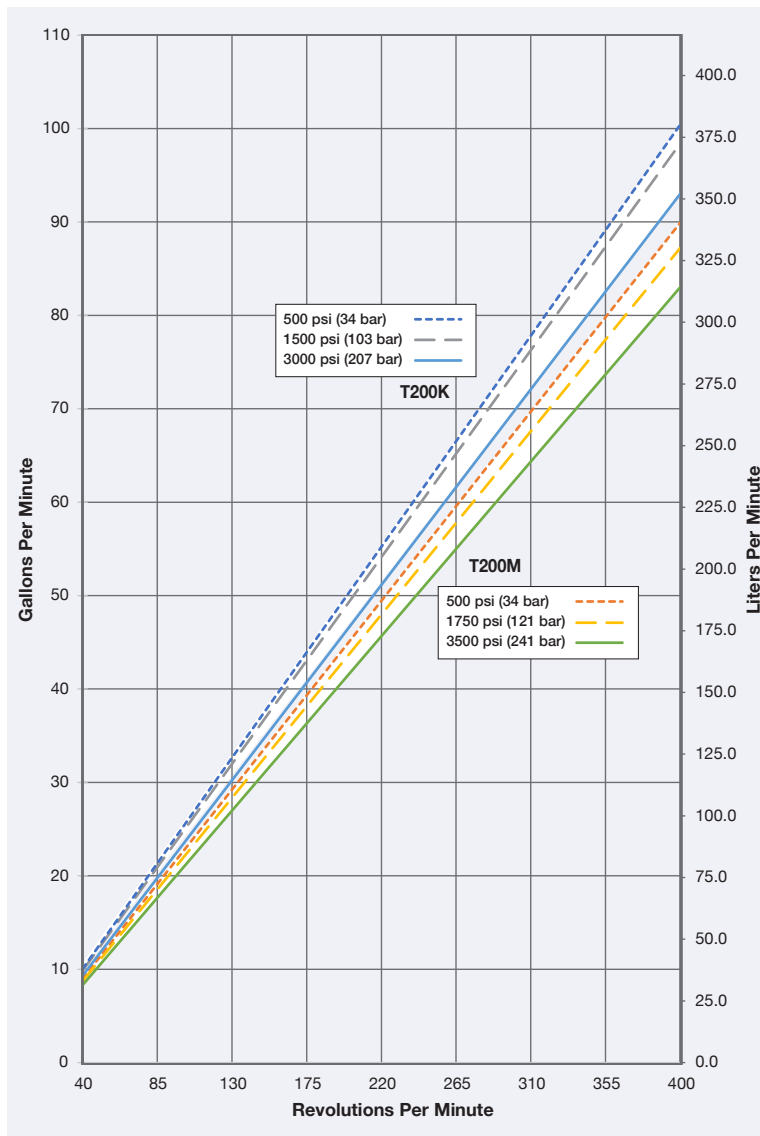
T200 Series Medium Pressure Performance

Capacities

Model	Max. Input rpm	Plunger Dia.		Max. Flow Capacities			Max. Pressure Ratings			
							Discharge		Inlet	
		Inches	mm	gpm	l/min	BPD	psi	bar	psi	bar
T200K	400	2.250	57	93	352	3189	3000	207	500	34
T200M	400	2.125	54	83	314	2846	3500	241	500	34

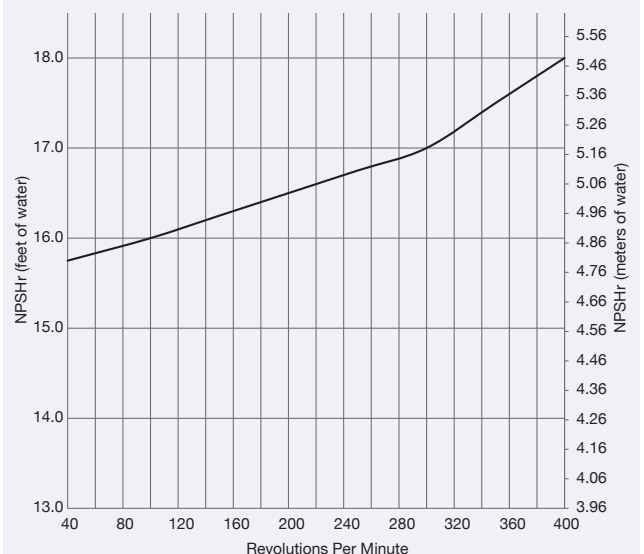
Consult factory when operating below 40 rpm.

Maximum Flow at Designated Pressure



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.

Net Positive Suction Head (NPSHr)



Due to the Wanner Engineering Continuous Improvement Program, specifications and other data may change without notice.

T200 Series Medium Pressure Specifications

Flow Capacities

Model	Pressure psi (bar)	rpm	gpm	l/min	BPD
T200K	3000 (207)	400	93	352	3189
T200M	3500 (241)	400	83	314	2846

Delivery

	Pressure psi (bar)	gal/rev	liters/rev
T200K	500 (34)	0.251	0.950
	1500 (103)	0.246	0.931
	3000 (207)	0.233	0.880
T200M	500 (34)	0.225	0.851
	1750 (121)	0.218	0.825
	3500 (241)	0.208	0.785

rpm

Maximum:	400
Maximum API 674:	310
Minimum:	40 (Consult factory for speeds less than 40 rpm.)

Maximum Discharge Pressure

Metallic Heads:	T200K	3000 psi (207 bar)
	T200M	3500 psi (241 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

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

Plunger Stroke Length 5 Inches (127 mm)

Shaft Diameter 4 inch (101.6 mm)

Shaft Rotation Uni-directional (See rotation arrow.)

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

Weight

Metallic Heads:	3000 lbs. (1361 kg)
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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!

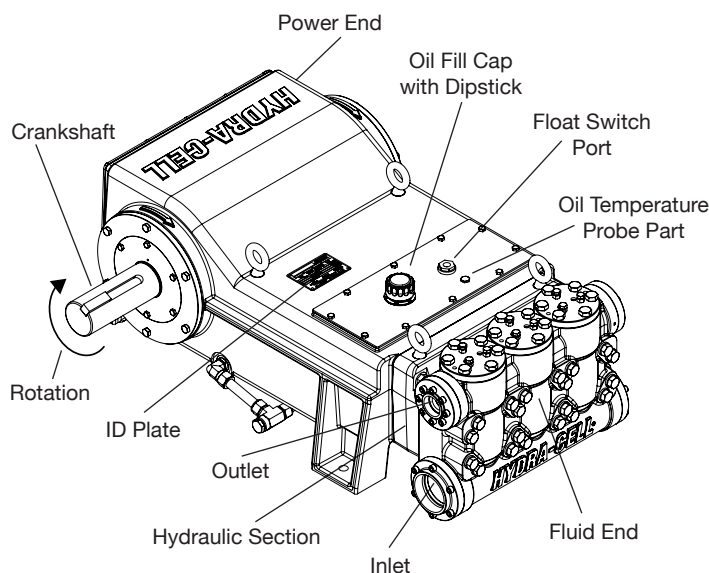
When sizing motors with variable speed drives (VFD): It is very important to select a motor and a VFD rated for constant torque inverter duty service and that the motor is rated to meet the torque requirements of the pump throughout desired speed range.

Fluid End Materials

Manifold:	Nickel Aluminum Bronze (NAB) Duplex Alloy 2205 Stainless Steel 316L Stainless Steel CF3M Hastelloy CX2M
Diaphragm/Elastomers:	FKM Buna-N
Diaphragm Follower Screw:	316 Stainless Steel Duplex Alloy 2205 Stainless Steel Hastelloy C
Valve Spring Retainer:	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

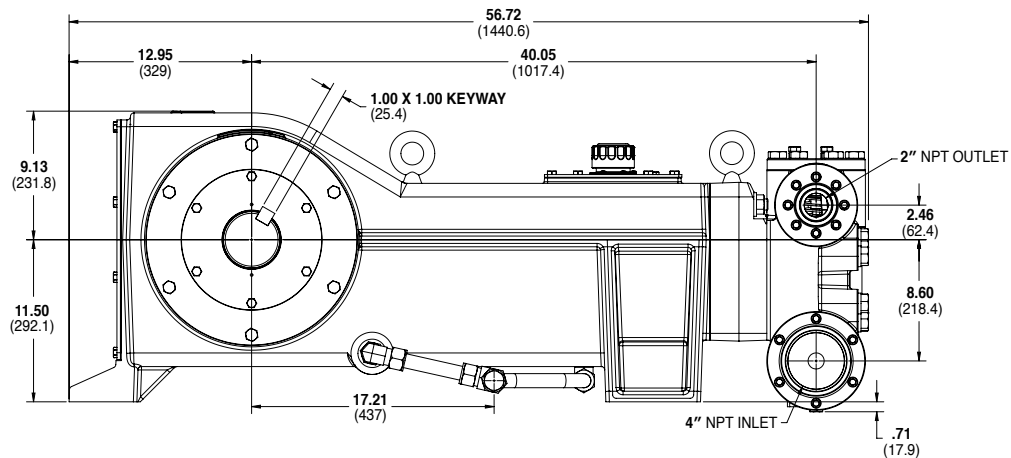
Crankshaft:	Ductile Iron
Connecting Rods:	Ductile Iron
Crossheads:	Ductile Iron
Crankcase:	Ductile Iron
Bearings:	Spherical Roller (main) Steel-backed Tri-metal (crankpin) Bronze (wristpin)



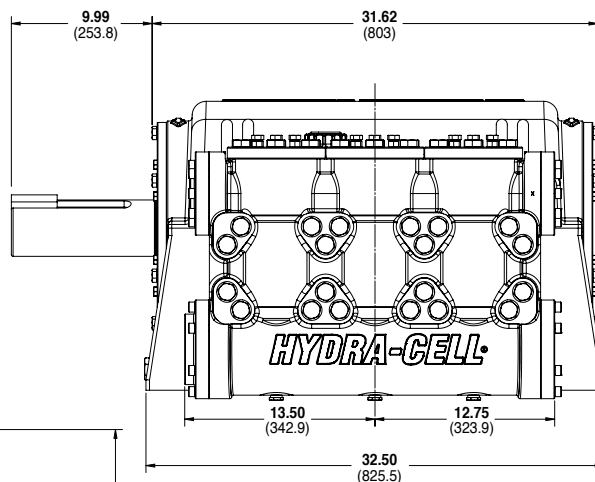
T200 Series Medium Pressure Representative Drawings

Threaded Version Inches (mm)

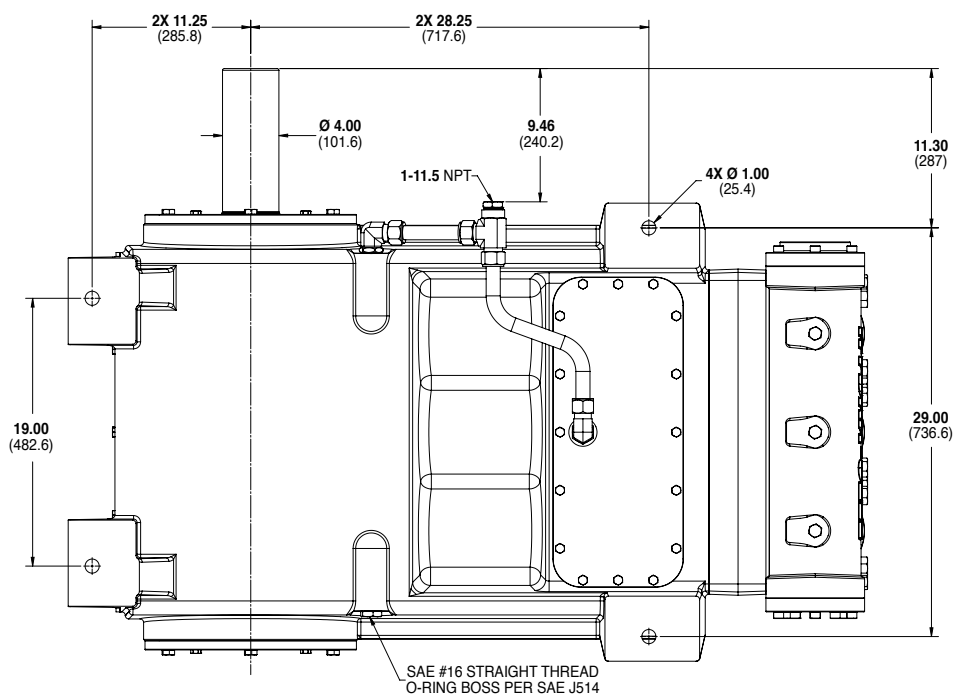
Side View



Front View



Bottom View



Note: Representative drawings only. Contact factory for additional drawings of specific models and configurations.

T200 Series Medium Pressure **How to Order**

Ordering Information

¹ T	² 2	³ 0	⁴ 0	⁵	⁶	⁷	⁸	⁹	¹⁰	¹¹	¹² T	¹³	¹⁴
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A complete T200 Series Medium Pressure Model Number contains 14 digits including 9 customer-specified design and materials options, for example: T200KADGHFETAC.

Medium Pressure

Digit	Order Code	Description
1-4		Pump Configuration
	T200	Shaft-driven
5		Performance
	K	Max. 93 gpm (352 l/min) 3189 BPD @ 3000 psi (207 bar)
	M	Max. 83 gpm (314 l/min) 2846 BPD @ 3500 psi (241 bar)
6		Pump Head Version
	A	NPT Threaded 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)
	R	ANSI Flange Ports (Steel)
	S	ANSI Flange Ports (316L Stainless Steel)
	T	ANSI Flange Ports (Hastelloy C)
7		Pump Head Material
	D	Nickel Aluminum Bronze (NAB)
	G	Duplex Alloy 2205 Stainless Steel
	S	316L Stainless Steel CF3M
	T	Hastelloy CX2M
8		Diaphragm & O-ring Material
	G	FKM
	T	Buna-N
9		Valve Seat Material
	H	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C

Digit	Order Code	Description
10		Valve Material
	F	17-4 Stainless Steel
	N	Nitronic 50
	T	Hastelloy C
11		Valve Springs
	E	Elgiloy
	T	Hastelloy C
12		Valve Spring Retainers
	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
	Y	No switch, flat back cover



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