

T200 Series Medium Pressure Models T200K & T200M

Maximum Flow Rate: 95 gpm (359 l/min) 3258 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.

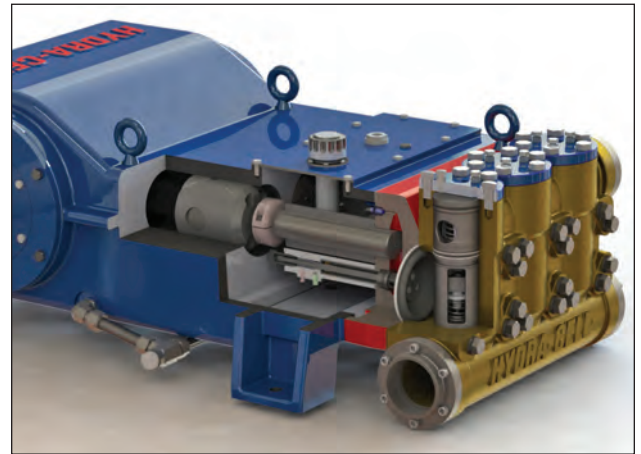
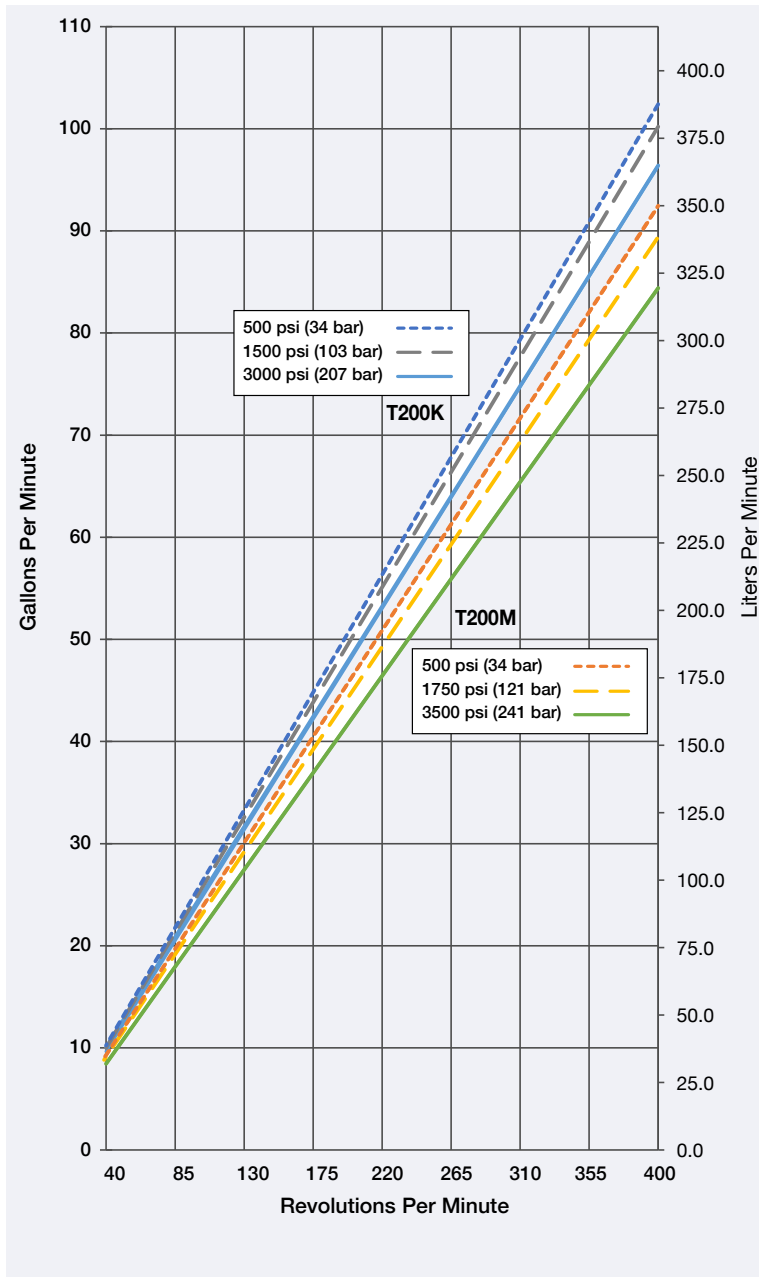
T200 Series Medium Pressure Performance

Capacities

Model	Max. Input rpm	Plunger Dia.		Max. Flow Capacities			Max. Pressure Ratings Discharge		Max. Pressure Ratings Inlet	
		Inches	mm	gpm	l/min	BPD	psi	bar	psi	bar
T200K	400	2.25	57	95	359	3258	3000	207	500	34
T200M	400	2.125	54	85	321	2915	3500	241	500	34

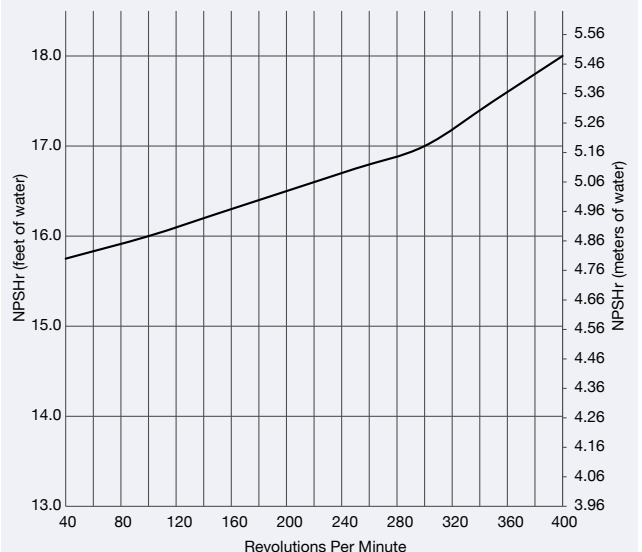
Consult factory when operating below 40 rpm.

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	95	359	3258
T200M	3500 (241)	400	85	321	2915

Delivery

	Pressure psi (bar)	gal/rev	liters/rev
T200K	500 (34)	0.256	0.969
	1500 (103)	0.251	0.949
	3000 (207)	0.241	0.914
T200M	500 (34)	0.231	0.874
	1750 (121)	0.223	0.845
	3500 (241)	0.211	0.800

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!

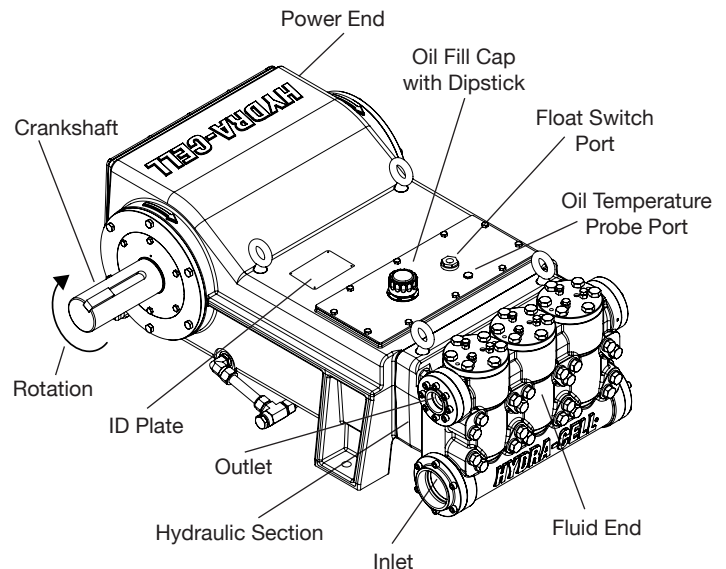
When sizing motors with variable speed drives (VFD): It is very important to select a motor and a VFD rated for constant torque inverter duty service and that the motor is rated to meet the torque requirements of the pump throughout desired speed range.

Fluid End Materials

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

Power End Materials

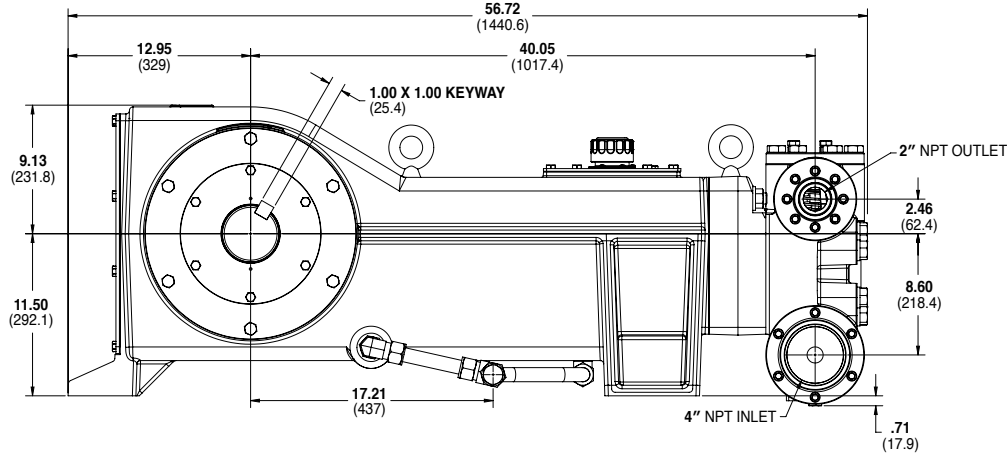
Crankshaft:	Ductile Iron
Crankcase:	Ductile Iron
Bearings:	Spherical Roller (crankshaft main) Steel-backed Tri-metal (crankpin) Bronze (wrist pin)
Crossheads:	Ductile Iron
Connecting Rods:	Ductile Iron



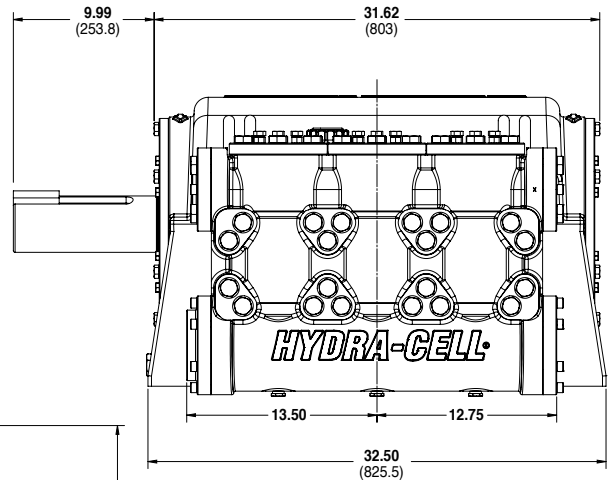
T200 Series Medium Pressure Representative Drawings

Threaded Version Inches (mm)

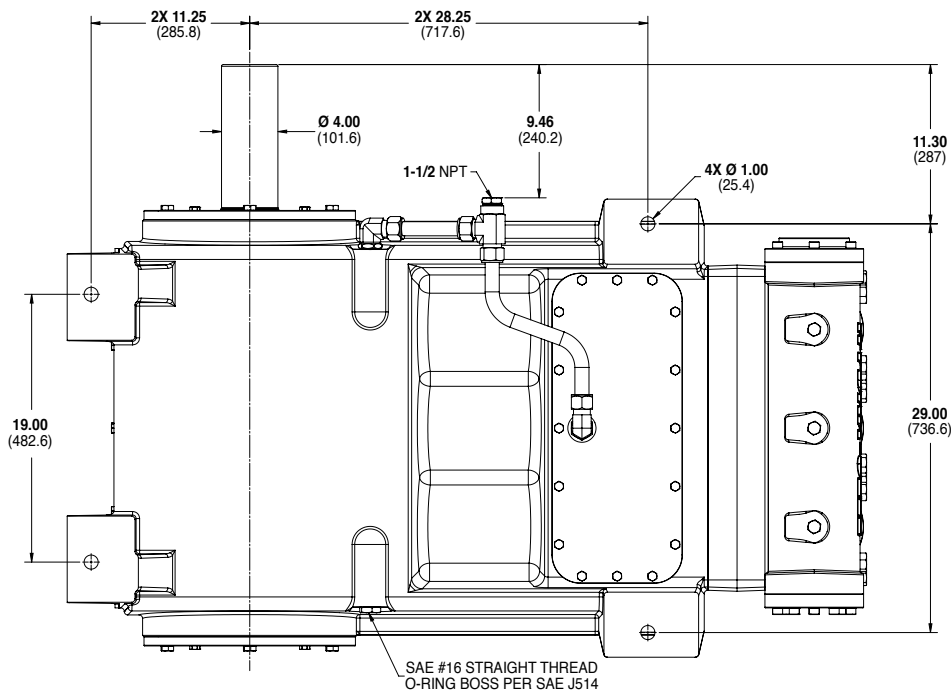
Side View



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

A complete T200 Series Medium Pressure Model Number contains 14 digits including 10 customer-specified design and materials options, for example: T200KADGHFESAC.

Medium Pressure

Digit	Order Code	Description
1-4		Pump Configuration
	T200	Shaft-driven
5		Performance
	K	Max. 95 gpm (359 l/min) 3258 BPD @ 3000 psi (207 bar)
	M	Max. 85 gpm (321 l/min) 2915 BPD @ 3500 psi (241 bar)
6		Pump Head Version
	A	NPT Threaded Ports (Steel)
	C	Weld Neck (Steel)
	D	Weld Neck (316L Stainless Steel)
	R	ANSI Flange Ports (Steel)
	S	ANSI Flange Ports (316L Stainless Steel)
7		Pump Head Material
	D	Nickel Aluminum Bronze (NAB)
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
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
	S	316 SST
	T	Hastelloy C

Digit	Order Code	Description
13		Hydra-Oil
	A	10W30 standard-duty oil
	B	40-wt.
	H	15W50 high-temp severe-duty synthetic oil
14		Oil Level Monitoring
	C	Float Switch, normally closed (preferred)
	O	Float Switch, normally open
	Y	No switch

Hydra-Cell®

Seal-less Pumps

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