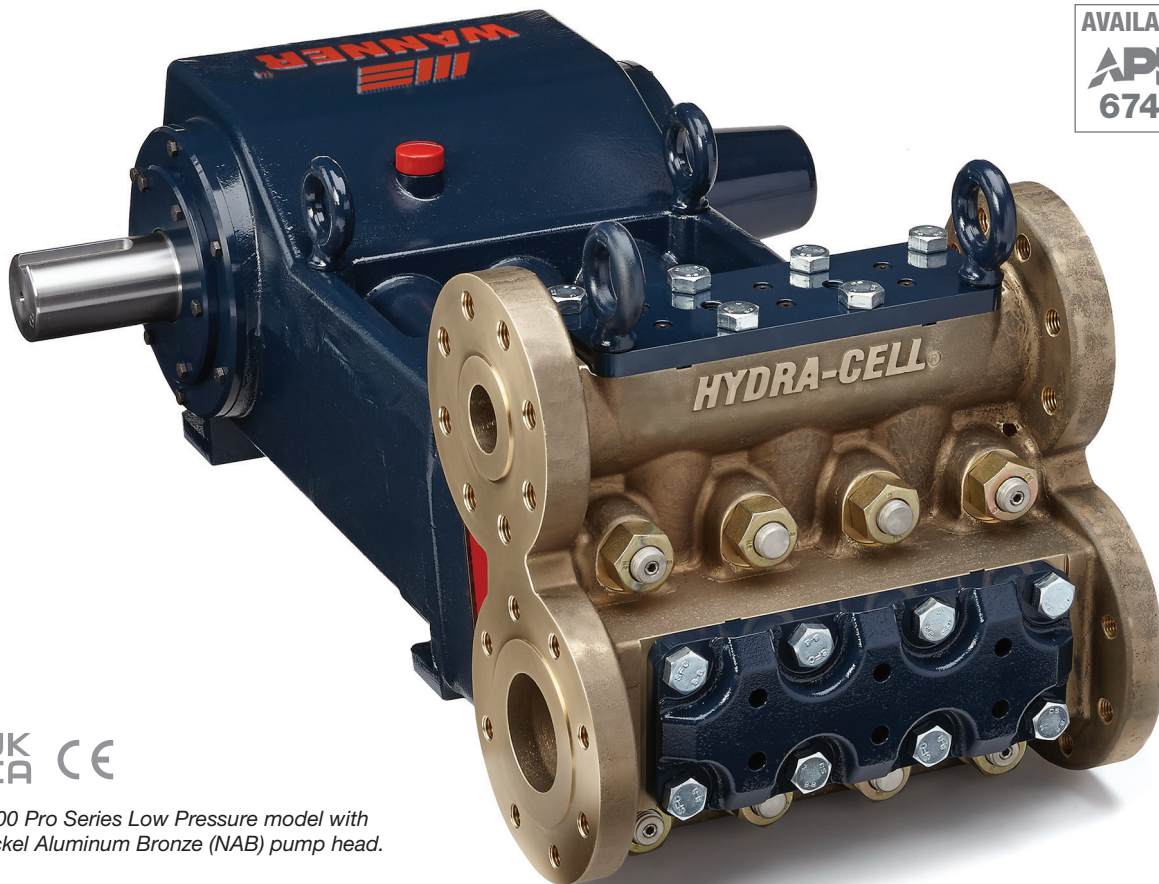


T100 PRO SERIES LOW PRESSURE

Maximum Flow Rate: 96 gpm (363 l/min) 3292 BPD
Maximum Pressure: 2100 psi (145 bar)

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



T100 Pro Series Low 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.

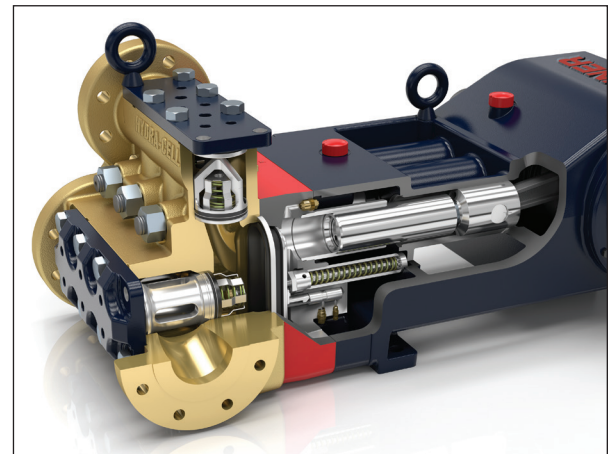
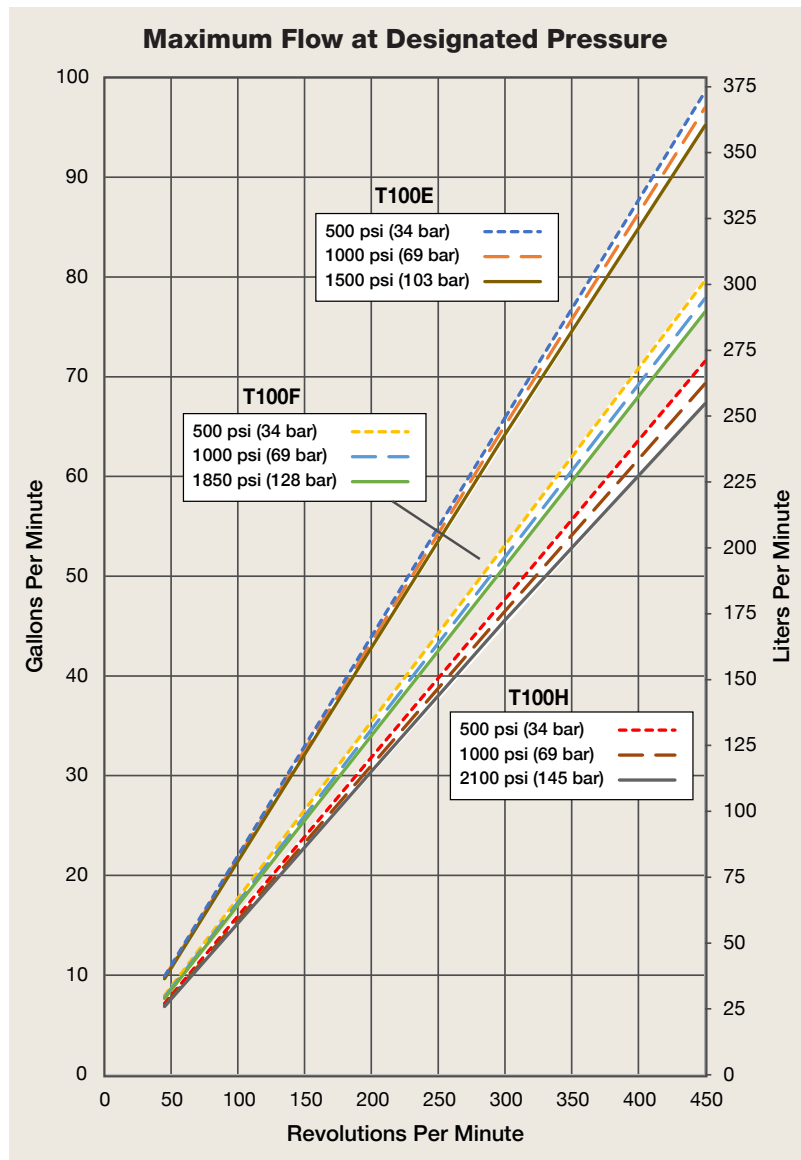


T100 Pro Low Pressure | Performance

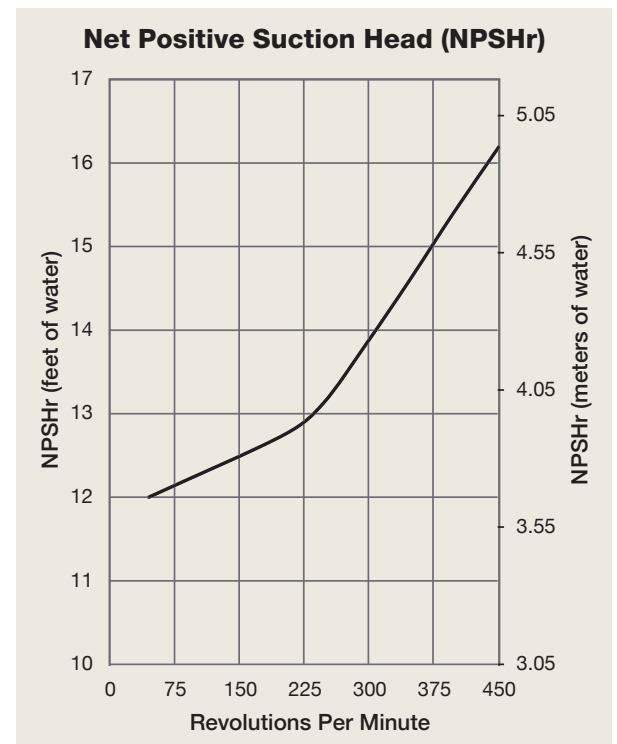
Capacities

| Model | Max. Input rpm | Plunger Dia. | | Max. Flow Capacities | | | Max. Pressure Ratings | | | |
|-------|----------------|--------------|----|----------------------|-------|------|-----------------------|-----|-------|-----|
| | | inches | mm | gpm | l/min | BPD | Discharge | | Inlet | |
| | | | | | | | psi | bar | psi | bar |
| T100E | 450 | 2.500 | 64 | 96 | 363 | 3292 | 1500 | 103 | 500 | 34 |
| T100F | 450 | 2.250 | 57 | 76 | 287 | 2605 | 1850 | 128 | 500 | 34 |
| T100H | 450 | 2.125 | 54 | 67 | 253 | 2297 | 2100 | 145 | 500 | 34 |

Consult factory when operating below 45 rpm



T100 Pro 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.

T100 Pro Low Pressure | Specifications

Flow Capacities

| Model | Pressure psi (bar) | rpm | gpm | l/min | BPD |
|-------|--------------------|-----|-----|-------|------|
| T100E | 1500 (103) | 450 | 96 | 363 | 3292 |
| T100F | 1850 (128) | 450 | 76 | 287 | 2605 |
| T100H | 2100 (145) | 450 | 67 | 253 | 2297 |

Delivery

| | Pressure psi (bar) | gal/rev | liters/rev |
|-------|--------------------|---------|------------|
| T100E | 500 (34) | 0.219 | 0.829 |
| | 1000 (69) | 0.216 | 0.818 |
| | 1500 (103) | 0.213 | 0.807 |
| T100F | 500 (34) | 0.176 | 0.665 |
| | 1000 (69) | 0.173 | 0.656 |
| | 1850 (128) | 0.170 | 0.645 |
| T100H | 500 (34) | 0.159 | 0.600 |
| | 1000 (69) | 0.154 | 0.584 |
| | 2100 (145) | 0.149 | 0.565 |

rpm

| | |
|----------|-----|
| Maximum: | 450 |
| Minimum: | 45 |

Consult factory for speeds less than 45 rpm.

Maximum Discharge Pressure

| | | |
|-----------------|-------|--------------------|
| Metallic Heads: | T100E | 1500 psi (103 bar) |
| | T100F | 1850 psi (128 bar) |
| | T100H | 2100 psi (145 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 Left or Right Side

Inlet Ports 3-1/2 inch Class 300 RF ANSI Flange

Discharge Ports 2 inch Class 900 RF ANSI Flange

Plunger Stroke Length 3-1/2 inch (88.9 mm)

Shaft Diameter 3 inch (76.2 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

18 US quarts (17 liters) - blank back cover
20.5 US quarts (19.4 liters) - oil level back cover
See page 5 for oil selection and specification.

Pump Weight

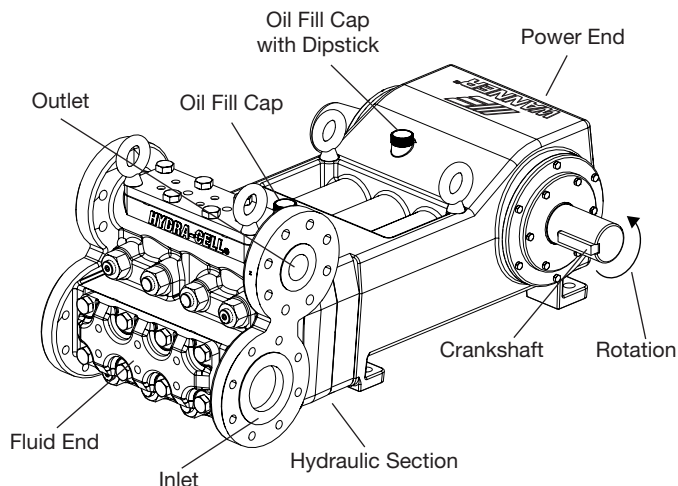
1100 lbs. (499 kg)

Fluid End Materials

| | |
|------------------------------|---|
| Manifold: | Nickel Aluminum Bronze (NAB) Duplex Alloy 2205 Stainless Steel 316L Stainless Steel CF3M Hastelloy CX2MW |
| Diaphragm/Elastomers: | FKM Buna-N Aflas EPDM |
| Diaphragm Follower Screw: | 316 Stainless Steel Duplex Alloy 2205 Stainless Steel Hastelloy C |
| Valve Spring Retainer: | 316 SST Hastelloy C |
| Check Valve Spring: | Elgiloy Hastelloy C |
| Valve Disc/Seat: | Tungsten Carbide 17-4 Stainless Steel Nitronic 50 Hastelloy C |
| Plug-Outlet Valve Port: | 316 Stainless Steel Duplex Alloy 2205 Stainless Steel 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: | 12L14 Steel |
| Crankcase: | Ductile Iron |
| Bearings: | Spherical Roller (main bearing) Steel Backed Babbitt (crankpin) Bronze (wristpin) |



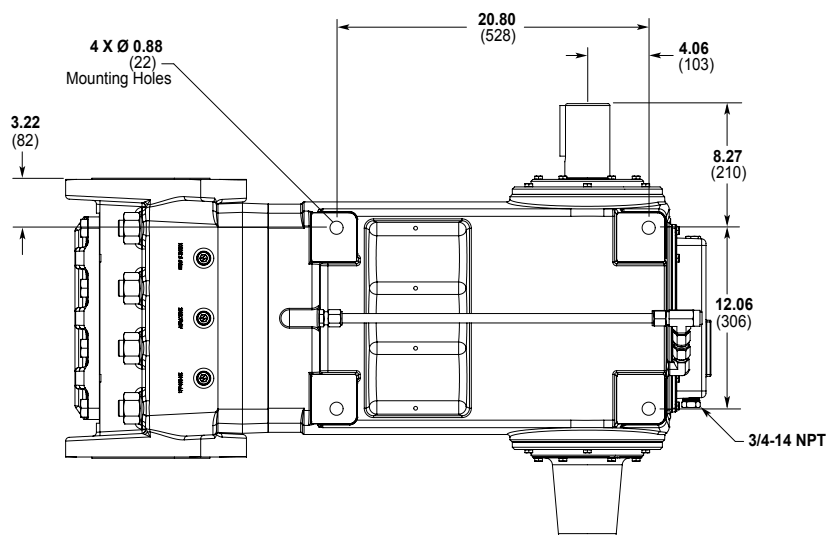
Due to the Wanner Engineering Continuous Improvement Program, specifications and other data are subject to change.

T100 Pro Low Pressure | Drawings

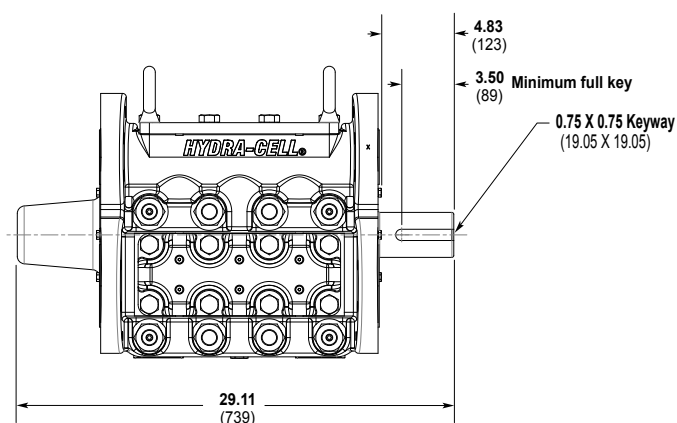
Flanged Version inches (mm)



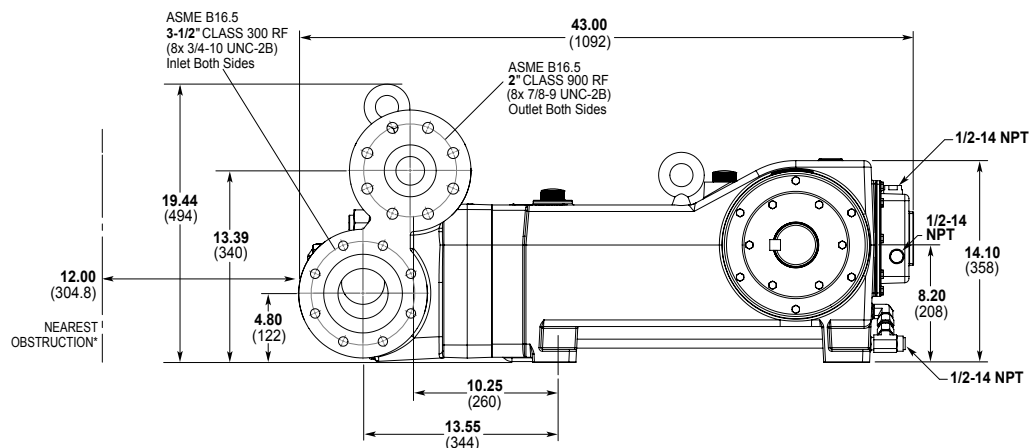
Bottom View



Front View



Side View



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

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

T100 Pro Low Pressure | How to Order

Ordering Information

A complete T100 Pro Series Low Pressure Model Number contains 14 digits including 9 customer-specified design and materials options, for example: T100ERDTHFESAC.

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

Low Pressure



| Digit | Order Code | Description |
|-------|------------|--|
| 1-4 | T100 | Pump Configuration Shaft-driven |
| 5 | E | Performance Max. 96 gpm (363 l/min) 3292 BPD @ 1500 psi (103 bar) |
| | F | Max. 76 gpm (287 l/min) 2605 BPD @ 1850 psi (128 bar) |
| | H | Max. 67 gpm (253 l/min) 2297 BPD @ 2100 psi (145 bar) |
| 6 | R | Pump Head Version ANSI Flanged Ports (RF on Inlet / RF on Discharge) |
| 7 | D | Pump Head Material Nickel Aluminum Bronze (NAB) |
| | G | Duplex Alloy 2205 Stainless Steel |
| | S | 316L Stainless Steel CF3M |
| | T | Hastelloy CX2MW |
| 8 | A | Diaphragm & O-ring Material Aflas |
| | E | EPDM (requires EPDM-compatible oil – Digit 13 oil code D) |
| | G | 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 |

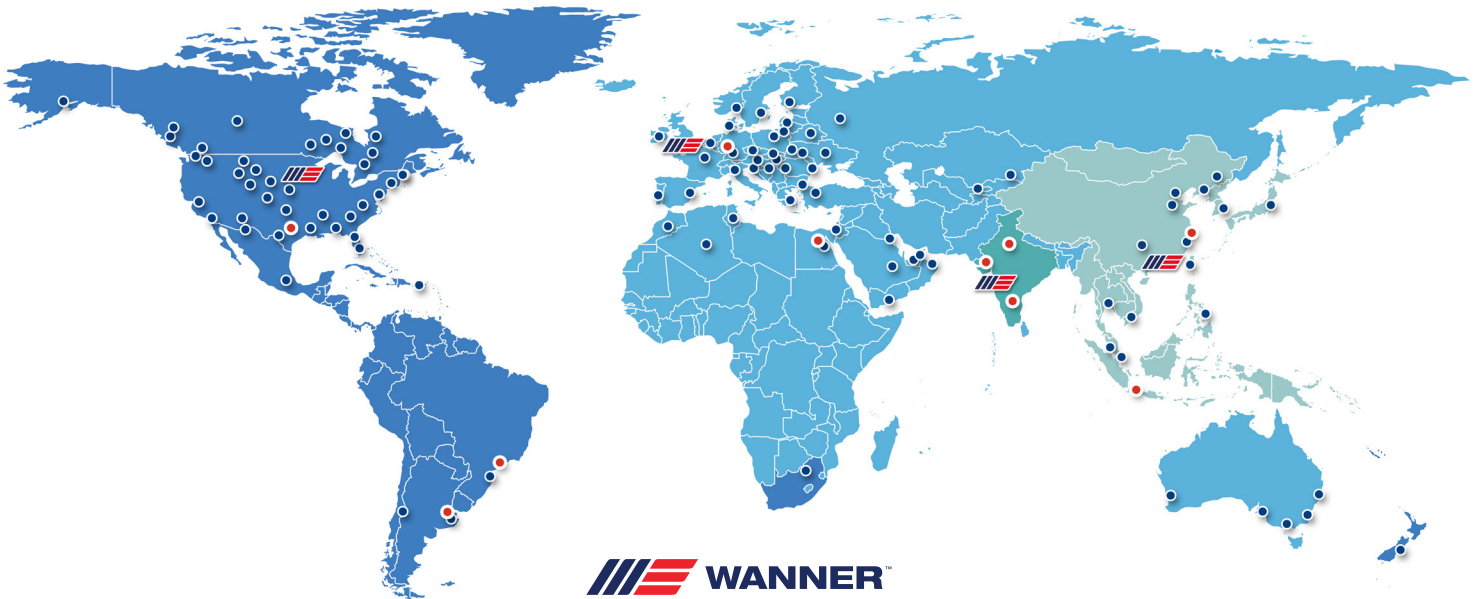
* Tungsten Carbide valve seat and disc are a matched set and must be purchased together along with appropriate valve springs.

| Digit | Order Code | Description |
|-------|------------|---|
| 12 | S | Valve Spring Retainers 316 Stainless Steel |
| | T | Hastelloy C |
| 13 | A | Hydra-Oil 10W30 standard-duty oil |
| | B | 40-wt. oil |
| | D | EPDM-compatible oil |
| | H | 15W50 high-temp severe-duty synthetic oil |
| | M | Food-contact 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 |
| | W | Float switch, ATEX/IECEx, 4-20 mA analog output (qualification required) |
| | X | Float switch, ATEX/IECEx, discrete output (qualification required) |
| | Y | No switch, flat back cover |

Note: The Oil Level Monitor Cover is an assembly that replaces the previous back cover on T100 Series pumps. It contains a float switch assembly that can trigger an alarm or shutdown when pre-defined levels of high or low oil are reached. It may also be ordered without a float switch cover.



Partners in over 70 countries



Global Sales and Technical Support

Americas

- Minneapolis, Minnesota USA
- Wichita Falls, Texas USA
- São Paulo, Brazil
- Buenos Aires, Argentina

EMEA | Australia

- Hampshire, United Kingdom
- Cairo, Egypt
- Remagen, Germany

Asia | Pacific

- Kowloon, Hong Kong
- Shanghai, China
- Jakarta, Indonesia

India

- Mumbai, India
- New Delhi
- Bangalore
- Gujarat



Illinois Location:

(847) 841-7867

860 Church Rd Elgin, IL 60123

Minnesota Location:

(651) 758-7867

330 Mill Bay South Suite 1511 Afton, MN 55001

PumpSupplyInc.com

