



Capacity to 450 GPM/102 M³/hr

Pressure to 200 PSI/14 Bar (Model 0450 to 400 PSI/27 Bar)

Viscosity to 910,000 SSU (200,000 cPs)

Temperature -40° to 300° F (-40° to 150° C)



SANITARY POSITIVE DISPLACEMENT PUMPS

TRA[®]10 Series



WRIGHT PUMP

ICEX
IDEX CORPORATION

The TRA[®]10 Pump Series



Typical Applications



- ▶ **Dairy:** milk, cream, curds, butter, soft cheese, yogurt, butter, margarine, ice cream
- ▶ **Bakery:** yeast, dough, fruit filling, icing, fats and oils
- ▶ **Meats:** sausage filling, fats, broths, gelatins, pet food
- ▶ **Canned Foods:** potato salad, baby food, soups, stews, tomatoes, relishes, pudding, dressings, mayonnaise, jams and jellies
- ▶ **Beverages:** beer, mash, wort, fruit juices, fruit concentrate
- ▶ **Candy:** sugars, chocolate, cocoa butter, corn syrup, gelatin
- ▶ **Flavorings:** syrups and concentrates
- ▶ **Dressings:** Mayonnaise and other prepared sauces
- ▶ **Cosmetics:** creams, lotions, jellies, shampoos, emulsions, toothpaste
- ▶ **Industrial:** automotive paints, inks, latex, polymers

The reliability of Wright Pump's positive displacement circumferential piston pumping principle has been proven over many decades. Its robust design and easy cleanability make it applicable for all sanitary fluids.

Wright Pumps' gentle action on shear-sensitive liquids, or slurries with soft solids, makes them the preferred technology for all areas of food processing, beverage and cosmetic manufacturing, worldwide.

Construction

- ▶ Pump casing is 316 Stainless Steel, interior finished to 3-A standards.
- ▶ Rotors are special "Wright 808[®]" non-galling, nickel-based alloy. Wright Pump manufactures this material in its own foundry for maximum quality control.
- ▶ Twin wing rotors are standard, with single wing rotors for large solids optional.
- ▶ One-piece 316L stainless steel shafts standard on models 0060, 0150 & 0180. High-strength 17-4 PH shafts standard on models 0300, 0450, 0600, 1300, 2200 & 3200.
- ▶ Powder-coated gear case standard (FDA white, RAL 9003). Stainless steel gear case optional on models 0060, 0150 & 0180.
- ▶ Helical timing gears minimize operating noise.
- ▶ Seal options include single O-ring seal, single mechanical seal, double O-ring seal with flush, or double mechanical seal with flush.
- ▶ Four-way mounting allows horizontal or vertical porting and provides mounting flexibility.



Pumps available with CE mark.

TRA[®]10 Pump Performance

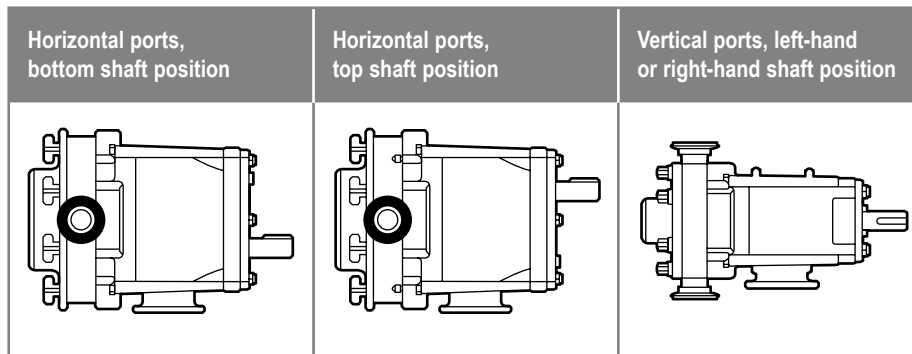
| TRA [®] 10 Model | Nominal Capacity | | Displacement per Revolution | | Maximum Pressure | | Temperature Range | | Standard Ports | | Optional Ports | | Maximum Speed (RPM) |
|---------------------------|------------------|--------------------|-----------------------------|-------|------------------|-----|-------------------|--------------|----------------|-----|----------------|-------|---------------------|
| | GPM | M ³ /hr | Gal. | Liter | PSI | Bar | Deg. F | Deg. C | in. | mm | in. | mm | |
| 0060 | 6.0 | 1.3 | 0.01 | 0.03 | 200 | 14 | -40° to 300° | -40° to 150° | 1.5 | 38 | 1.0 | 25.4 | 800 |
| 0150 | 9.0 | 2.0 | 0.01 | 0.05 | 200 | 14 | -40° to 300° | -40° to 150° | 1.5 | 38 | — | — | 700 |
| 0180 | 17.0 | 3.8 | 0.03 | 0.11 | 200 | 14 | -40° to 300° | -40° to 150° | 1.5 | 38 | 2.0 | 51.0 | 600 |
| 0300 | 36.0 | 8.2 | 0.06 | 0.23 | 200 | 14 | -40° to 300° | -40° to 150° | 1.5 | 38 | 2.0 | 51.0 | 600 |
| 0450* | 59.0 | 13.3 | 0.10 | 0.38 | 200 | 14 | -40° to 300° | -40° to 150° | 2.0 | 51 | — | — | 600 |
| 0600 | 90.0 | 20.4 | 0.15 | 0.58 | 200 | 14 | -40° to 300° | -40° to 150° | 2.5 | 64 | 3.0 | 76.0 | 600 |
| 1300 | 150.0 | 34.1 | 0.25 | 0.96 | 200 | 14 | -40° to 300° | -40° to 150° | 3.0 | 76 | 4.0 | 102.0 | 600 |
| 2200 | 310.0 | 70.4 | 0.52 | 1.98 | 200 | 14 | -40° to 300° | -40° to 150° | 4.0 | 102 | — | — | 600 |
| 3200 | 450.0 | 102.0 | 0.75 | 2.85 | 200 | 14 | -40° to 300° | -40° to 150° | 6.0 | 152 | — | — | 600 |



(Example of Rectangular Flange model)

| TRA [®] 10 Rectangular Flange Model | Nominal Capacity | | Displacement per Revolution | | Maximum Pressure | | Temperature Range | | Inlet (W x L) | | Outlet | | Maximum Speed (RPM) |
|--|------------------|--------------------|-----------------------------|-------|------------------|-----|-------------------|--------------|---------------|----------------|--------|-------|---------------------|
| | GPM | M ³ /hr | Gal. | Liter | PSI | Bar | Deg. F | Deg. C | in. | mm | in. | mm | |
| 0240 | 11.6 | 2.5 | 0.03 | 0.11 | 200 | 14 | -40° to 300° | -40° to 150° | 1.31 x 4.93 | 33.27 x 125.22 | 1.5 | 38.1 | 400 |
| 0340 | 24.0 | 5.4 | 0.06 | 0.22 | 200 | 14 | -40° to 300° | -40° to 150° | 1.75 x 6.75 | 44.50 x 171.45 | 2.0 | 50.8 | 400 |
| 0640 | 60.0 | 13.6 | 0.15 | 0.57 | 200 | 14 | -40° to 300° | -40° to 150° | 2.24 x 8.82 | 56.90 x 224.03 | 2.5 | 57.2 | 400 |
| 1340 | 100.0 | 22.7 | 0.25 | 0.96 | 200 | 14 | -40° to 300° | -40° to 150° | 2.97 x 9.25 | 75.44 x 234.95 | 3.0 | 76.2 | 400 |
| 2240 | 200.0 | 45.4 | 0.52 | 1.97 | 200 | 14 | -40° to 300° | -40° to 150° | 3.87 x 11.00 | 98.30 x 279.40 | 4.0 | 101.6 | 400 |

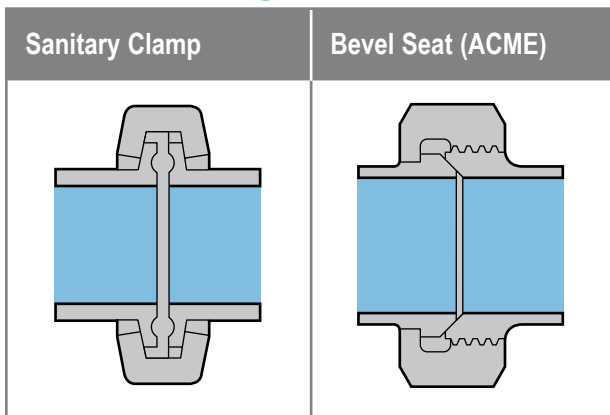
Installation Positions 4-Way Mounting



Performance Range

- ▶ **Capacity Range:** 0.1 to 450 gpm (0.02 to 102 m³/hr)
- ▶ **Pressure Range:** to 200 PSI/14 Bar
* Model 0450 to 400 PSI/27 Bar
- ▶ **Temperature Range:** -40°F to +300°F (-40°C to +150°C)
Note: Hot clearances required for high temp operation.
- ▶ **Viscosity Range:** 28 to 910,000 SSU (1 to 200,000 cPs)
Note: Consult factory for applications greater than 910,000 SSU/200,000 cSt. Chocolate clearances available.

Port Configurations

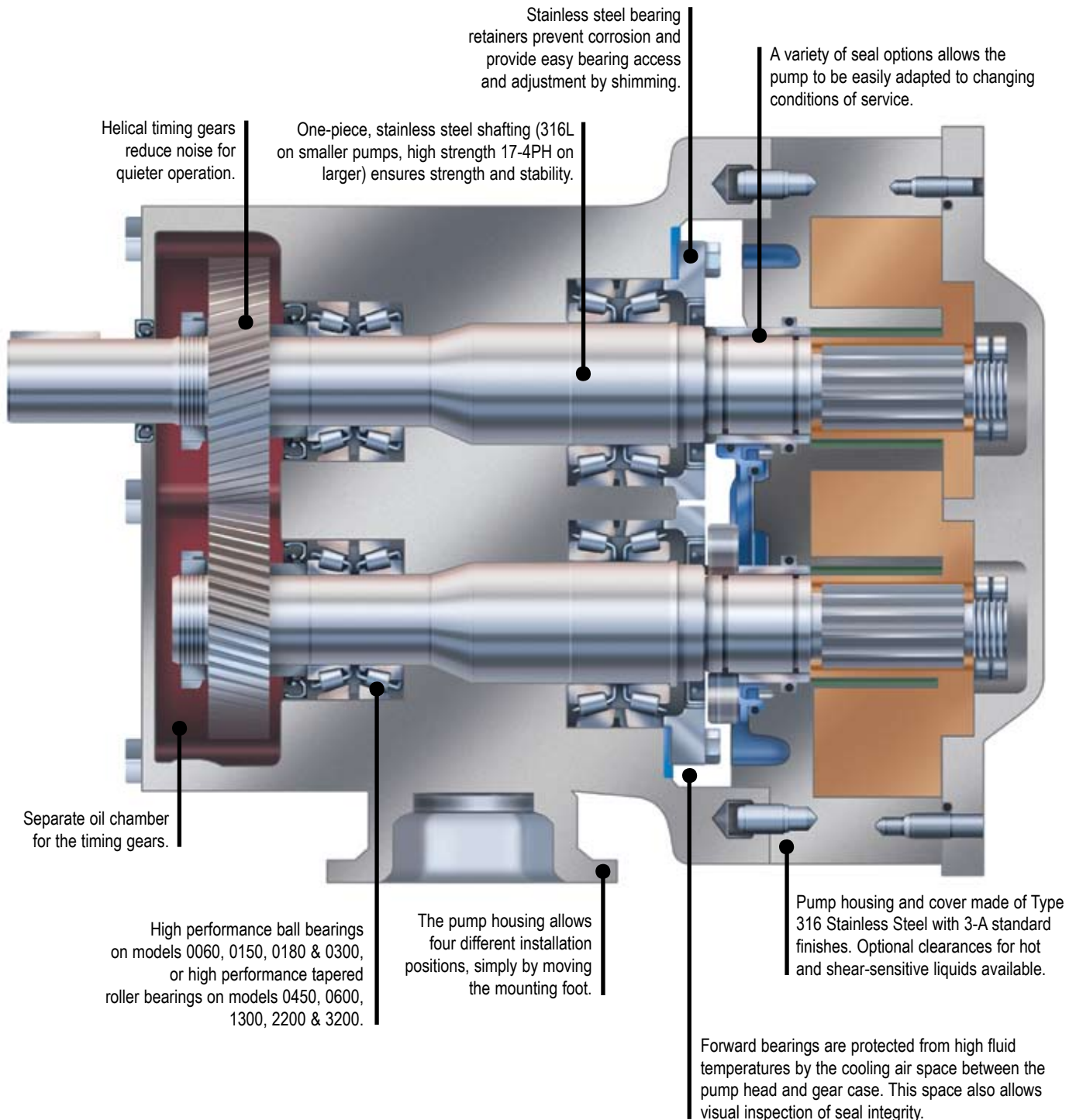


Other port configuration options include:

- ▶ DIN 11851
- ▶ RJT
- ▶ NPT
- ▶ SMS
- ▶ 150# or 300# flange
- ▶ Rectangular inlet flange

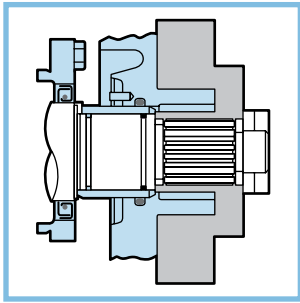
Wright TRA[®]10 Features

- ▶ Time tested and proven circumferential piston design.
 - ▶ Exceptional engineering and manufacturing quality.
 - ▶ Parts interchangeable with other major CPP manufacturer's pumps. Contact your local authorized Wright Pump distributor for details.
 - ▶ Helical timing gears instead of spur gears.
 - ▶ SiC/SiC seals instead of Carbon/Ceramic.
 - ▶ Powder coated casing (FDA white, RAL 9003), instead of painted iron.
 - ▶ Pump housing dowel pinned and bolted to gear case, instead of dowel pinned only, to protect seals on disassembly and simplify cleaning.
- Wright offers added value, standard:**
- ▶ One-piece stainless steel shafts instead of welded bi-metal.



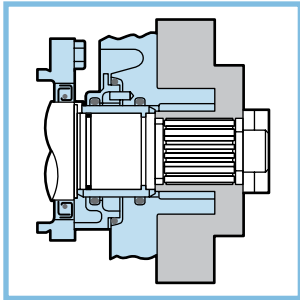
Shaft Sealing Options

...for different liquids and conditions of service



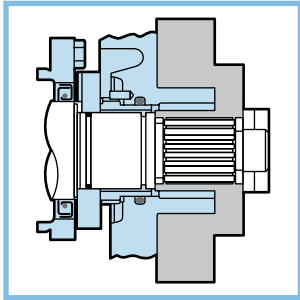
Single O-Ring Seals

- ▶ Standard O-rings and Cover Seals: Buna
- ▶ Optional O-rings and Cover Seals: FKM, EPDM, Silicone



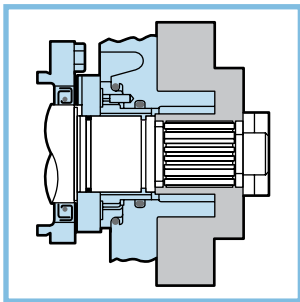
Double O-Ring Seals with Flush

- ▶ Standard O-rings and Cover Seals: Buna
- ▶ Optional O-rings and Cover Seals: FKM, EPDM, Silicone



Single Mechanical Seals

- ▶ Standard Seal Faces: SiC/SiC
- ▶ Standard O-rings and Cover Seals: Buna
- ▶ Optional Faces: Carbon, Ceramic or Chrome Oxide
- ▶ Optional O-rings and Cover Seals: FKM, EPDM, Silicone



Double Mechanical Seals with Flush

- ▶ Standard Seal Faces: SiC/SiC
- ▶ Standard O-rings and Cover Seals: Buna
- ▶ Optional Faces: Carbon, Ceramic or Chrome Oxide
- ▶ Optional O-rings and Cover Seals: FKM, EPDM, Silicone

Remanufacturing Value

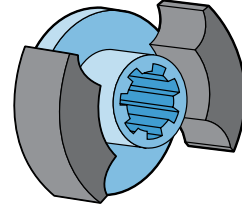
Wright Pump offers unrivaled value by remanufacturing worn Wright® and Waukesha® circumferential piston pumps to like-new condition providing you with increased efficiency and reduced slip for enhanced productivity.

Wright Pump will replace all parts except the cover, rotor case, gear case in their remanufacturing process, and provide you a one-year warranty on the work. Machined in 0.020" increments as required by wear, the rotor case and cover are outfitted with corresponding oversized rotors. The Wright TRA®10/Waukesha® U1 can be remanufactured up to 4 times, and the Wright TRA®20/

Rotors

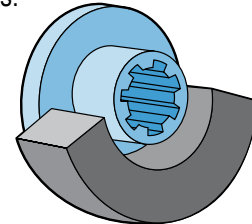
Twin Wing Rotors Standard.

Suitable for all liquids, provides minimum pulsation.



Single Wing Rotors Optional.

Provides reduced shear on shear-sensitive fluids or large solids such as fruit pieces, nut kernels, cheese curds or meats.



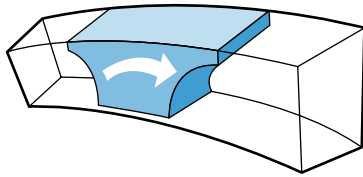
Waukesha® U2 up to three times for unmatched savings and a better bottom-line. In two weeks or less, Wright Pump will remanufacture and complete factory tests to ensure your pumps perform from day one and beyond. Best of all, having your Waukesha® pumps remanufactured by Wright gets you all of our improved features such as:

- ▶ One-piece stainless steel shafts
- ▶ Helical timing gears for higher load carrying and quieter operation
- ▶ Stainless steel bearing retainers for increased corrosion resistance

WRIGHT's Positive Displacement Circumferential Piston Pumping Principle

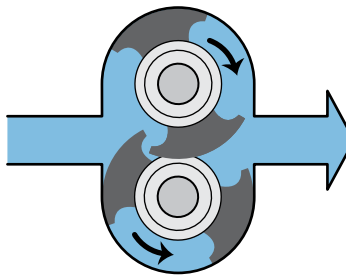


Wright Pumps' rotor wings (pistons) rotate around the circumference of the channel in the pump casing. This continuously generates a partial vacuum at the suction port as the rotors unmesh, causing fluid to enter the pump. The fluid is transported around the channel by the rotor wings, and is displaced as the rotor wings re-mesh, generating pressure at the discharge port. Pump output is directly proportional to speed, and direction of flow is reversible.



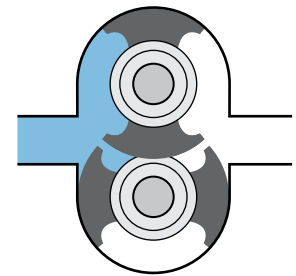
A

The deep channels in which the rotors travel provide large voids to minimize shear and bruising of solids.



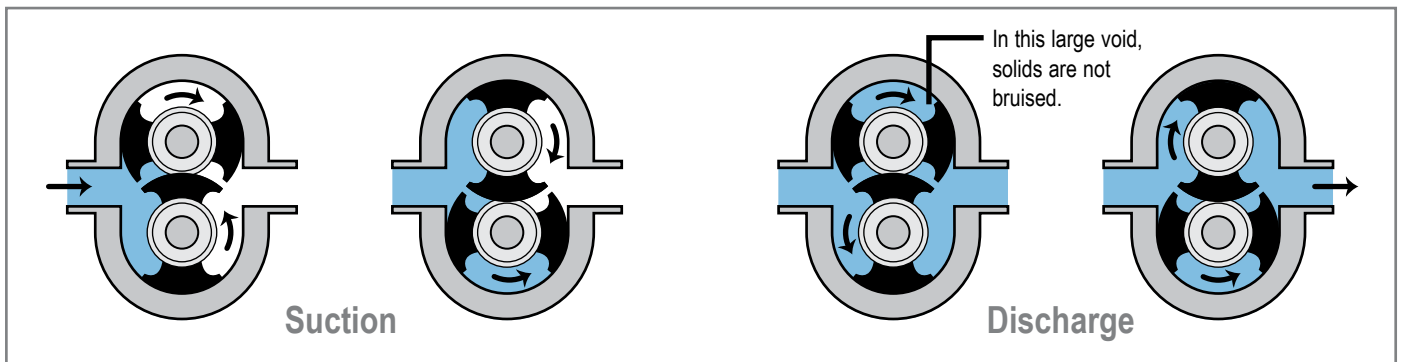
B

The rotors are made of "Wright 808®" non-galling alloy, allowing extremely tight clearances between rotating and stationary surfaces, which ensures high efficiency and metering accuracy, even on thin liquids.



C

The forward part of each non-galling rotor rotates in a recess in the pump head to minimize deflection even at high discharge pressures.

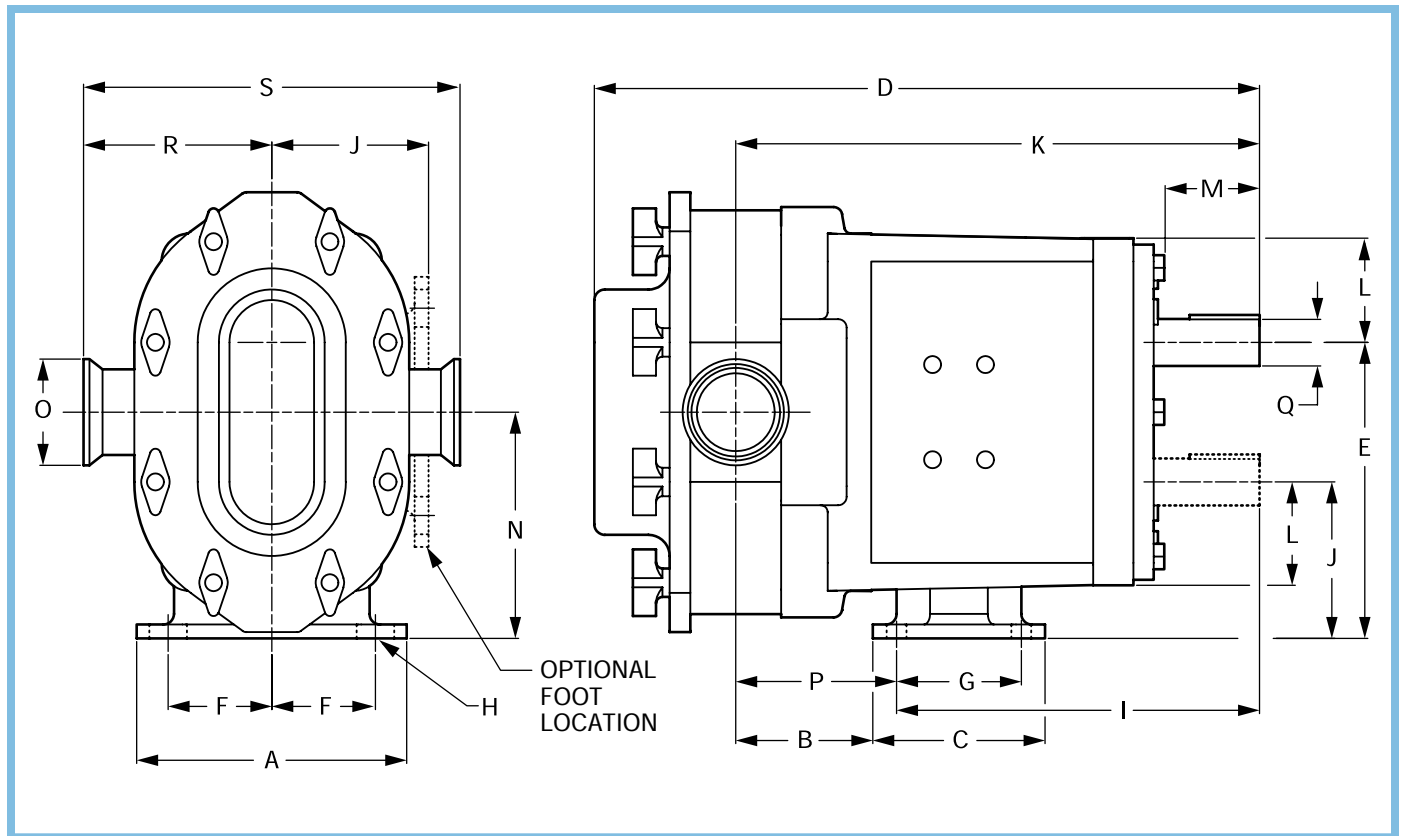


Unique Cleaning and Maintenance Features

- ▶ Designed for easy strip cleaning, the pump casing is independently fastened to the gearbox to prevent damage to the seals when the cover is removed, and to allow the rotors to be turned while spraying down the fluid chamber.
- ▶ Bearing retainers are stainless steel, not carbon steel, ensuring longer life under harsh cleaning conditions.
- ▶ Grease fittings are threaded, not pressed in, to prevent accidental removal during greasing.

TRA[®]10 Dimensions

| Model | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q Ø | R | S | Weight |
|-------|-----|-------|------|-------|-------|-------|------|------|---------------------|-------|------|-------|------|------|-------|------|------|-------|------|-------|----------|
| 0060 | in. | 4.75 | 2.34 | 3.20 | 12.04 | 5.50 | 1.94 | 2.31 | 0.375 x 0.31 (slot) | 6.82 | 2.93 | 9.61 | 1.81 | 2.00 | 4.21 | 1.50 | 2.79 | 0.875 | 3.49 | 6.97 | 53 lb. |
| | mm | 121 | 59 | 81 | 303 | 140 | 49 | 59 | 9.5 x 8 (slot) | 173 | 74 | 244 | 46 | 51 | 107 | 38 | 71 | 22.23 | 89 | 177 | 24 kg |
| 0150 | in. | 4.75 | 2.34 | 3.20 | 12.04 | 5.50 | 1.94 | 2.31 | 0.375 x 0.31 (slot) | 6.82 | 2.93 | 9.61 | 1.81 | 2.00 | 4.21 | 1.50 | 2.79 | 0.875 | 3.49 | 6.97 | 53 lb. |
| | mm | 121 | 59 | 81 | 303 | 140 | 49 | 59 | 9.5 x 8 (slot) | 173 | 74 | 244 | 46 | 51 | 107 | 38 | 71 | 22.23 | 89 | 177 | 24 kg |
| 0180 | in. | 4.75 | 2.34 | 3.20 | 12.46 | 5.50 | 1.94 | 2.31 | 0.375 x 0.31 (slot) | 6.82 | 2.93 | 9.84 | 1.81 | 2.00 | 4.21 | 1.50 | 3.02 | 0.875 | 3.55 | 7.09 | 53 lb. |
| | mm | 121 | 59 | 81 | 316 | 140 | 49 | 59 | 9.5 x 8 (slot) | 173 | 74 | 250 | 46 | 51 | 107 | 38 | 77 | 22.23 | 90 | 180 | 24 kg |
| 0300 | in. | 6.25 | 2.78 | 4.25 | 14.52 | 6.86 | 2.42 | 2.56 | 0.438 x 0.44 (slot) | 7.77 | 3.56 | 11.61 | 2.62 | 2.32 | 5.21 | 1.50 | 3.84 | 1.250 | 4.25 | 8.50 | 99 lb. |
| | mm | 159 | 71 | 108 | 369 | 174 | 61 | 65 | 11 x 11 (slot) | 197 | 90 | 295 | 67 | 59 | 132 | 38 | 98 | 31.75 | 108 | 216 | 45 kg |
| 0450 | in. | 8.25 | 4.14 | 5.87 | 18.91 | 9.56 | 3.50 | 4.12 | 0.56 x 0.50 (slot) | 10.14 | 5.06 | 15.42 | 3.50 | 2.15 | 7.31 | 2.00 | 5.28 | 1.625 | 5.38 | 10.75 | 290 lb. |
| | mm | 210 | 105 | 149 | 480 | 243 | 89 | 105 | 14 x 13 (slot) | 258 | 129 | 392 | 89 | 55 | 186 | 51 | 134 | 41.28 | 136 | 273 | 132 kg |
| 0600 | in. | 8.25 | 4.14 | 5.87 | 18.73 | 9.56 | 3.50 | 4.12 | 0.56 x 0.50 (slot) | 10.14 | 5.06 | 15.14 | 3.50 | 2.15 | 7.31 | 2.50 | 5.00 | 1.625 | 5.37 | 10.75 | 290 lb. |
| | mm | 210 | 105 | 149 | 480 | 243 | 89 | 105 | 14 x 13 (slot) | 258 | 129 | 385 | 89 | 55 | 186 | 63 | 127 | 41.28 | 136 | 273 | 132 kg |
| 1300 | in. | 8.25 | 4.79 | 5.87 | 19.66 | 9.56 | 3.50 | 4.12 | 0.56 x 0.50 (slot) | 10.12 | 5.06 | 15.77 | 3.50 | 2.15 | 7.31 | 3.00 | 5.65 | 1.625 | 5.37 | 10.75 | 312 lb. |
| | mm | 210 | 122 | 149 | 499 | 243 | 89 | 105 | 14 x 13 (slot) | 257 | 129 | 401 | 89 | 55 | 186 | 76 | 144 | 41.28 | 136 | 273 | 142 kg |
| 2200 | in. | 8.50 | 5.07 | 9.0 | 23.29 | 12.38 | 3.75 | 7.25 | 0.56 x 0.19 (slot) | 12.74 | 6.38 | 18.49 | 4.50 | 2.63 | 9.38 | 4.00 | 5.75 | 2.000 | 6.63 | 13.25 | 555 lb. |
| | mm | 216 | 129 | 229 | 592 | 314 | 95 | 184 | 14 x 5 (slot) | 324 | 162 | 470 | 114 | 67 | 238 | 102 | 146 | 50.80 | 168 | 337 | 252 kg |
| 3200 | in. | 12.00 | 4.12 | 11.63 | 30.17 | 13.88 | 5.25 | 8.00 | 0.66 Ø | 16.55 | 6.88 | 21.92 | 5.06 | 4.06 | 10.38 | 6.00 | 5.37 | 2.375 | 8.00 | 16.00 | 1050 lb. |
| | mm | 305 | 105 | 295 | 766 | 353 | 133 | 203 | 16 Ø | 420 | 175 | 557 | 129 | 103 | 264 | 152 | 136 | 60.45 | 203 | 406 | 477 kg |



Note: For dimensions on options such as flanged inlet port or vented covers, please contact factory.

*Sanitary Pumps,
Parts, Remanufacturing & Accessories*

WRIGHT PUMP

The Right Alternative

WRIGHT PUMP

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WR-TRA10/Rev 03/06

Litho In U.S.A.