

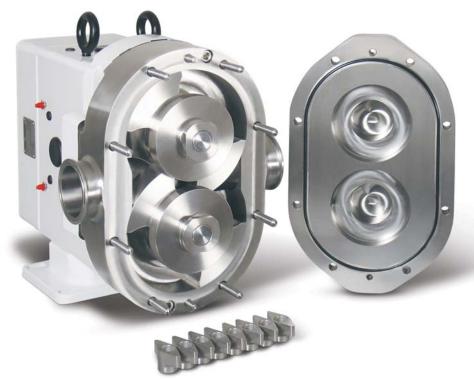


## **TRA10 Series**



Capacity to 450 GPM/102 M<sup>3</sup>/hr

## The TRA10 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



CE Pumps available with CE mark. 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 gearcase standard (FDA white, RAL 9003). Stainless steel gearcase 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.









## **Pump Performance**

#### TRA10 Models

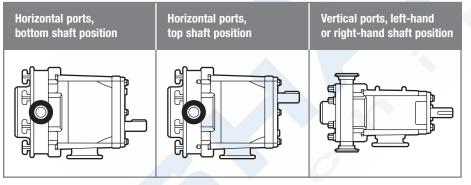
Criteria	UNITS	0060	0150	0180	0300	0450	0600	1300	2200	3200				
Output per Revolution	Gallons	0.008	0.014	0.029	0.060	.098	0.153	0.254	0.522	.754				
	Liters	0.031	0.054	0.110	0.227	.371	0.579	0.961	1.976	2.854				
Maximum Speed	RPM	800	700	600	600	600	600	600	600	600				
Maximum Capacity	GPM	6	9	17	36	58	90	150	310	450				
	M3/hr	1.3	2.0	3.8	8.2	13.2	20.4	34.1	70.4	102				
Maximum Pressure	PSI		2	00		400		2	00					
	Bar		1	4		27	14							
Temperature Range	Deg. F	-40° to 300°												
	Deg. C					-40° to 150°	2							
Standard Port Size	IN	1, 1.5	1, 1.5	1.5	1.5	2	2.5	3	4	6				
Optional Port Sizes	IN	-	-	2	2	1	3	4	—	-				

#### **Rectangular Flange Models**

Criteria	UNITS	0240	0340	0640	1340	2240						
Output per Revolution	Gallons	.029	.060	.15	.25	.52						
	Liters	.11	.22	.57	.96	1.97						
Maximum Speed	RPM	400	400	400	400	400						
Maximum Capacity	GPM	11.6	24	60	100	200						
	M3/hr	2.5	5.4	13.6	22.7	45.4						
Maximum Pressure	PSI	200										
	Bar	14										
Temperature Range	Deg. F	-40° to 300°										
Temperature nange	Deg. C			-40° to 150°	)	/						
Inlet W x L	IN	1.31 x	1.75 x	2.24 x	2.97 x	3.87 x						
		4.93	6.75	8.82	9.25	11						
Discharge	IN	1.5	2	2.5	3	4						



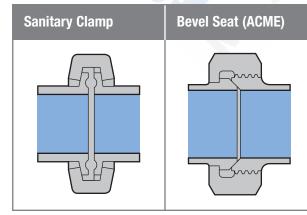
### Installation Positions 4-Way Mounting



### 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)

## **Port Configurations**



# Other port configuration options include:

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

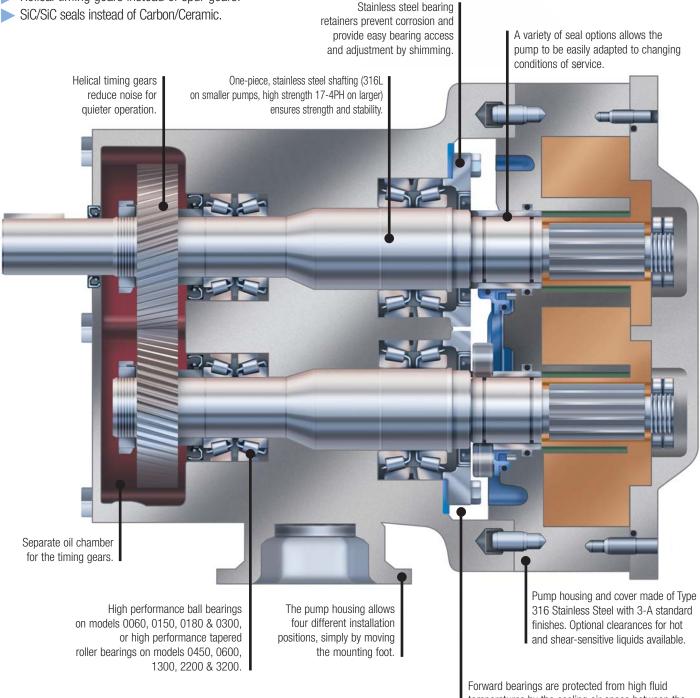
# Wright TRA10 Features

- Time tested and proven circumferential piston design.
- Exceptional engineering and manufacturing quality.
- Parts interchangeable with Waukesha<sup>®</sup> U1 series.

#### Wright offers added value, standard:

- One-piece stainless steel shafts instead of welded bi-metal.
- Helical timing gears instead of spur gears.
- SiC/SiC seals instead of Carbon/Ceramic.

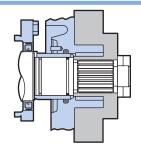
- Powder coated casing (FDA white, RAL 9003), instead of painted iron.
- Pump housing dowel pinned and bolted to gearcase, instead of dowel pinned only, to protect seals on disassembly and simplify cleaning.



temperatures by the cooling air space between the pump head and gearcase. This space also allows visual inspection of seal integrity.

## 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

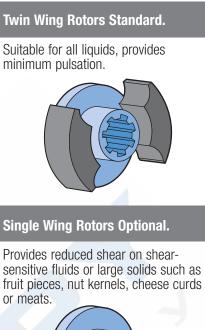
#### **Single Mechanical Seals**

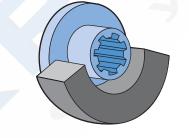
- Standard Seal Faces: SiC/SiC
- Standard O-rings and Cover Seals: Buna
- Optional Faces: Carbon, Ceramic or Chrome Oxide
- Optional O-rings and Cover Seals: FKM, EPDM, Silicone

#### **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

## Rotors

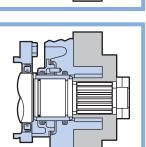


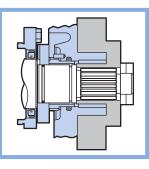


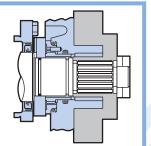


### **About Wright Pump**

Wright Pump was established in 1996 by a group of former executives of Waukesha Cherry-Burrell. Wright first developed a line of replacement parts that were interchangeable with those of Waukesha<sup>®</sup> pumps, and later manufactured complete pumps which were drop-in replacements, but with significant improvements standard, like helical timing gears, one-piece stainless steel shafts, high-strength 17-4 PH shafts on larger sizes, powder-coated gearboxes, four-way mounting and solid one-piece covers. Wright Pump has been a part of IDEX Corporation since 2002.



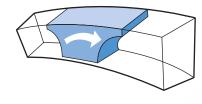




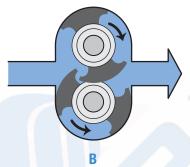
## WRIGHT's Positive Displacement Circumferential Piston Pumping Principle



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.



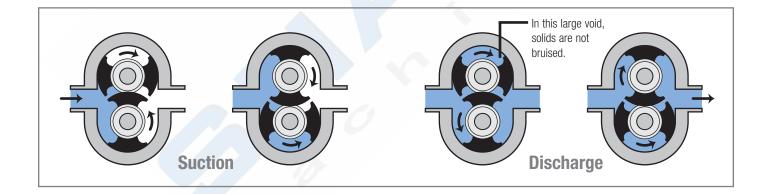
A The deep channels in which the rotors travel provide large voids to minimize shear and bruising of solids.



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.

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

C

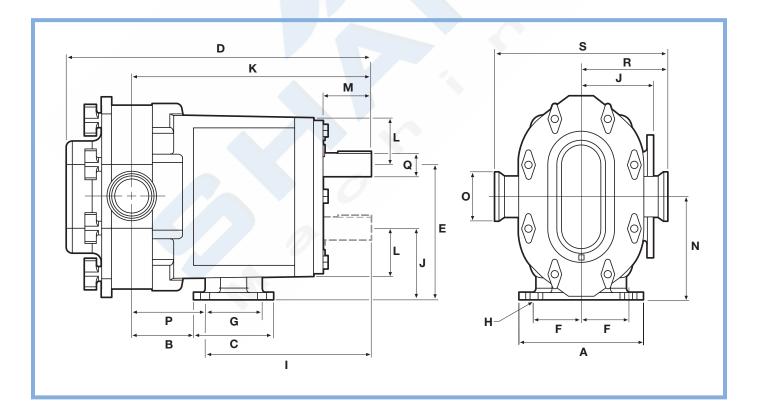


### **Unique Cleaning and Maintenance Features**

- 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.

## Dimensions

Mode	el A	В	C	D	E	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S	We	eight
TRA10 0060																					
in.	5.00	2.36	3.19	12.04	5.50	1.94	2.31	0.375 x 0.71 (slot)	6.77	2.93	9.53	1.89	2.00	4.21	1.5	2.79	0.875	3.49	6.97	lb.	53
mm	127	60	81	303	140	49	59	9.5 x 18 (slot)	172	74	242	48	51	107	38	71	22.23	89	177	kg	24
TRA1	0 0150																				
in.	5.00	2.36	3.19	12.04	5.50	1.94	2.31	0.375 x 0.71 (slot)	6.77	2.93	9.53	1.89	2.00	4.21	1.5	2.79	0.875	3.49	6.97	lb.	53
mm	127	60	81	303	140	49	59	9.5 x 18 (slot)	172	74	242	48	51	107	38	71	22.23	89	177	kg	24
TRA10 0180																					
in.	5.00	2.36	3.19	12.46	5.50	1.94	2.31	0.375 x 0.71 (slot)	6.77	2.93	9.76	1.89	2.00	4.21	1.5	3.03	0.875	3.55	7.09	lb.	53
mm	127	60	81	316	140	49	59	9.5 x 18 (slot)	172	74	248	48	51	107	38	77	22.23	90	180	kg	24
TRA1	0 0300																				
in.	6.25	2.80	4.25	14.58	6.86	2.31	2.56	0.375 x 0.71 (slot)	7.77	3.56	11.61	2.64	2.32	5.21	1.5	3.84	1.250	4.25	8.50	lb.	99
mm	159	71	108	370	174	59	65	9.5 x 18 (slot)	197	90	295	67	59	132	38	98	31.75	108	216	kg	45
TRA1	0 0450																				
in.	8.125	4.13	5.25	18.91	9.56	3.50	4.12	0.56 x 1.06 (slot)	10.06	5.06	15.27	3.50	2.50	7.31	2	5.01	1.625	5.38	10.75	lb.	290
mm	206	105	133	480	243	89	105	14 x 27 (slot)	256	129	388	89	63.5	186	51	127	41.28	136	273	kg	132
TRA1	0 0600																				
in.	8.125	4.13	5.25	18.91	9.56	3.50	4.12	0.56 x 1.06 (slot)	10.06	5.06	15.16	3.50	2.50	7.31	2.5	5.01	1.625	5.38	10.75	lb.	290
mm	206	105	133	480	243	89	105	14 x 27 (slot)	256	129	385	89	63.5	186	63	127	41.28	136	273	kg	132
TRA1	0 1300																				
in.	8.125	4.76	5.25	19.85	9.56	3.50	4.12	0.56 x 1.06 (slot)	10.06	5.06	15.79	3.50	2.50	7.31	3	5.65	1.625	5.38	10.75	lb.	312
mm	206	121	133	504	243	89	105	14 x 27 (slot)	256	129	401	89	63.5	186	76	144	41.28	136	273	kg	142
TRA1	0 2200																		1		
in.	9.00	3.70	8.50	23.37	12.38	3.75	7.25	0.56 x 1.06 (slot)	14.00	6.38	18.49	4.00	2.75	9.38	4	4.44	2.000	6.63	13.25	lb.	555
mm	229	94	216	594	314	95	184	14 x 27 (slot)	355	162	470	102	70	238	102	113	50.8	168	337	kg	252
TRA1	0 3200																				
in.	12.00	4.12	16.55	25.87	13.88	5.25	8.00	.66 x 1.06 (slot)	16.55	6.88	21.86	5.06	4.24	10.38	6	5.37	2.375	16.00	8.00	lb.	1050
mm	305	105	420	657	353	133	203	16 x 29 (slot)	420	175	552	129	108	263	152	136	60.45	406	203	kg	477



### Sanitary Pumps, Parts, Remanufacturing & Accessories

# WRIGHT PUMP

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#### WRIGHT PUMP

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Tel: (021) 6488-1886 Fax: (021) 5186-2316 E-mail:sharry@sharry-sh.com www.sharry-sh.com

