



Capacity to 900 GPM (210 M³/hr)

Pressure to 190 PSI (13 Bar)

Viscosity to 2,700 SSU (600 cPs)

Temperature to 380° F (195° C)



SANITARY CENTRIFUGAL PUMPS

TRA[®]500 Series



WRIGHT PUMP

ICX
IDEX CORPORATION

The TRA[®]500 Series Centrifugal Pump

With its proven design, Wright Pump's TRA[®]500 series centrifugal pumps provide processors a lower cost of ownership with its ease of installation, ease of maintenance, and reduced parts inventory.

Built with close internal tolerances for exceptionally low NPSH (Net Positive Suction Head), forward-thinking impeller design, and only 316L stainless steel components, the TRA[®]500 series is your ideal solution for all areas of dairy, food processing, beverage, biopharm, and other

demanding sanitary applications. What's more, the series meets the most stringent sanitary standards for being CIP-able and SIP-able.

The TRA[®]500 Series of sanitary centrifugal pumps are offered in both non-volute (circular) and volute style housings. The non-volute TRA[®]50 models provides superior low flow efficiency and offer enhanced accuracy with controlling devices.

The TRA[®]55 and TRA[®]54 model's volute style housings are for applications that require steady discharge pressures at higher capacities over a wide range of flows.

When it comes to quality, Wright Pump tests each TRA[®]500 series pump to ensure performance from day one and beyond. The fourteen sizes and many options of this centrifugal series ensure you have the right solution that precisely matches your specific application construction needs.



TRA[®]500 Series Construction

- ▶ Cast 316L stainless steel.
- ▶ Exclusive "no weld" clamp style connections on TRA[®]500, 501, 502, 503, 504, 505, 506 models – clamp style connection fittings are "machined-in-place".
- ▶ Integral inlet/outlet in the housing for ease of maintenance.
- ▶ Stainless steel flange adapters (motor to pump head) are standard – no painted cast iron.
- ▶ Fully adjustable head orientation for installation flexibility.
- ▶ Full material traceability and material certification available.
- ▶ Exterior surfaces are polished for the ultimate clean look – no "as cast" surfaces.
- ▶ One size seal fits all – up through 30 horsepower.
- ▶ Pumps can be changed from single to double mechanical seals without changing shafts or flange adapters.
- ▶ "Drop-in" dimensionally interchangeable with Fristam[®] FPX and FPR pumps.
- ▶ Full wear and spare part interchangeability of seals, gaskets, impeller nuts, impellers, and much more.

Typical Applications

- ▶ **Beverages:** high fructose corn syrup, single strength fruit juices, beer, water, liquors, wine, wort, yeast slurries
- ▶ **Dairy:** milk, cream, whey (up to 50% solids), ice cream mix, buttermilk
- ▶ **Candy:** sugar solutions, chocolate, corn syrup
- ▶ **Oils:** cooking, frying, salad
- ▶ **Personal Care:** mouthwash, cologne, after shave
- ▶ **Cosmetics:** shampoo, lotions
- ▶ **CIP:** solutions, caustics, enzyme cleaners, sanitizers
- ▶ **Pharmaceuticals and biotech:** process waters (RO, DI, Analytical)



A Lower Cost of Ownership for Processors

Today's consumers expect an ever increasing array of top quality foods and beverages to be continuously available, while being produced with absolute quality and integrity – at the lowest possible price. Consequently, this results in a fiercely competitive marketplace with severe pressure to reduce total cost of ownership.

The TRA®500 Series centrifugal pump from Wright Pump is your solution to a lower cost of ownership while providing the flexibility your operations need. Its simple, robust cast 316L stainless steel construction provides the durability, integrity, and absolute quality required for your sanitary fluid transfer operations.

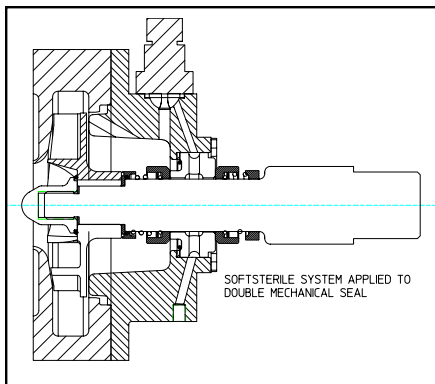
Pump installation has never been easier - the fully adjustable flange/pump head of the TRA®500 Series' provides superior orientation for faster, easier, better fit-up to your system. Self-alignment occurs naturally with the series' simple shaft lock collar that requires no special tools. Even its machined-in-place, "no-weld" sanitary clamp style fittings simplify system connection, eliminates leaks, and potential contamination point.

Maintenance is made simple with the TRA®500 Series' integral inlet/outlet housing ports, which provide better serviceability of the series' back pull out design. They also eliminate the extra service requirement and leak potential associated with piping realignment. Whether your operations require CIP or SIP, clean-up is a breeze on the TRA®500 Series with its standard, stainless steel flange adapter that eliminates the paint chipping and rust associated with traditional cast iron parts. Additionally, the polished exterior pump surfaces provide the ultimate in easy-to-clean appearance.

The TRA®500 Series will reduce your maintenance inventory significantly with its interchangeability of virtually all wear and spare parts such as seals, gaskets, impellers and more.

Best of all, the fourteen sizes of TRA®500 series centrifugal pumps are designed to be dimensionally interchangeable, drop-in replacements for another leading brand of sanitary centrifugal pumps. Contact your local authorized Wright Pump Distributor for details.

TRA®500 Series Softsterile™ Internal Seal Flush System

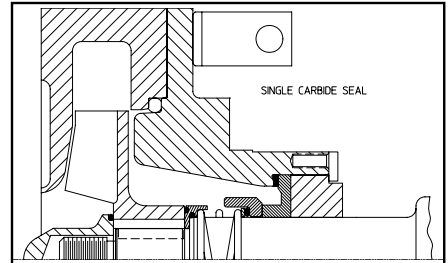


For high purity applications where double seals are required, the Softsterile™ patent pending system eliminates all external flush piping loops with their multiple connections, gaskets, elbows, compression fittings and tubes – all of which can be sources of contamination, misalignment, gasket extrusion and damage.

Shaft Sealing Options

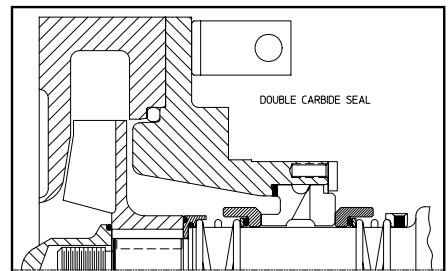
Single Internal Mechanical Seal

- ▶ Standard seal faces: Chrome Oxide / Carbon
- ▶ Standard elastomers: Viton®
- ▶ Optional seal faces: Silicon Carbide
- ▶ Optional elastomers: EPDM, PTFE, FKM, USP Class VI



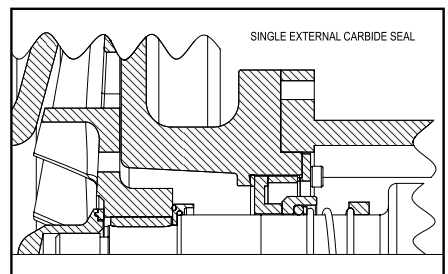
Double Internal Mechanical Seal

- ▶ Internal seal flushing for water-like pure liquids
- ▶ Standard seal faces: Chrome Oxide/Carbon/Chrome Oxide
- ▶ Standard elastomers: Viton®
- ▶ Optional seal faces: Silicon Carbide
- ▶ Optional elastomers: EPDM, PTFE, FKM, USP Class VI



Single External Mechanical Seal

- ▶ Standard seal faces: Silicon Carbide / Chrome Oxide
- ▶ Standard elastomers: Viton®
- ▶ Optional seal faces: Silicon Carbide / Silicon Carbide
- ▶ Optional elastomers: EPDM, PTFE, FKM, USP Class VI



Wright TRA[®]500 Series Features & Benefits

◀ Machined-In-Place Ports ▶

Integral inlet and outlet ports are machined-in-place providing “no-weld” sanitary clamp-style fittings (through model TRA[®]506) that eliminate welding, ensuring the highest uniform integrity.

◀ Polished Exterior Surfaces ▶

Exterior pump surfaces are polished, no “as cast” pump exterior surfaces provide the ultimate in easy-to-clean appearance.

◀ Exceptionally Low NPSH ▶

Very small clearances affords low NPSH, ideal for vacuum, liquids with slight viscosity, high temperatures or low NPSHA conditions.

◀ Fully Adjustable Flange Adapter ▶

Fully adjustable flange adapter/pump head orientation for best fit-up and fine adjustment in hard to reach piping arrangements.

◀ Corrosion Resistant Flange Adapter ▶

Durable, stainless steel flange adapter eliminates the painted cast iron parts that can chip and rust, which may require regular maintenance.

◀ Shaft Lock Collar ▶

Simple shaft lock collar permits quick, easy installation while providing self-alignment, with no special tool requirements.

◀ Customized Sealing Options ▶

Tailored sealing solutions available for virtually every liquid and application. Changing from single- to double-mechanical seal is simple and does not require optional shafts or flange adapters to be purchased.

◀ Reduced Maintenance Inventory ▶

Two sizes of mechanical seals fit the entire line, with one size fitting the TRA[®]500 series models through 30 HP. The series also provides full wear and spare part interchangeability of seals, gaskets, impeller nuts, impellers, and much more - reducing maintenance inventory.

◀ Product Integrity ▶

The TRA[®]500 Series is CIP-able and SIP-able. Its impeller is designed for gentle handling of shear sensitive products. Impellers are dynamically balanced to ISO 1940/1 standards. Heavy-wall, cast 316L stainless steel construction extends service life and minimizes vibration.

◀ ‘Drop-In’ Replacement Design ▶

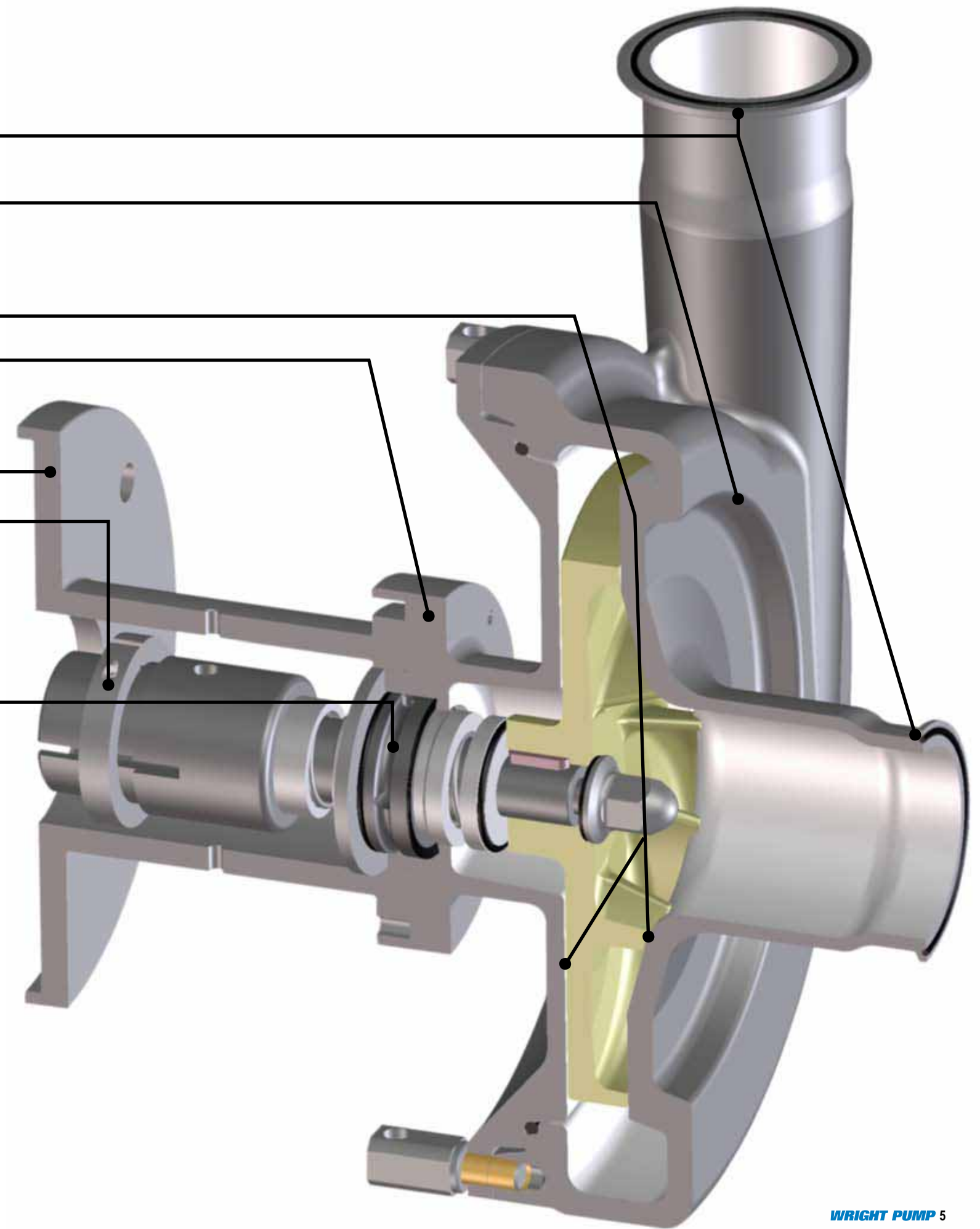
The TRA[®]500 Series are dimensionally interchangeable with Fristam[®] FPX and FPR models, contact your local authorized Wright Pump Distributor for more details.

◀ Non-Volute Housing Design ▶

The non-volute (circular) housing of the TRA[®]50 models provide superior low flow efficiency and offer enhanced accuracy with controlling devices.

◀ Volute Housing Design ▶

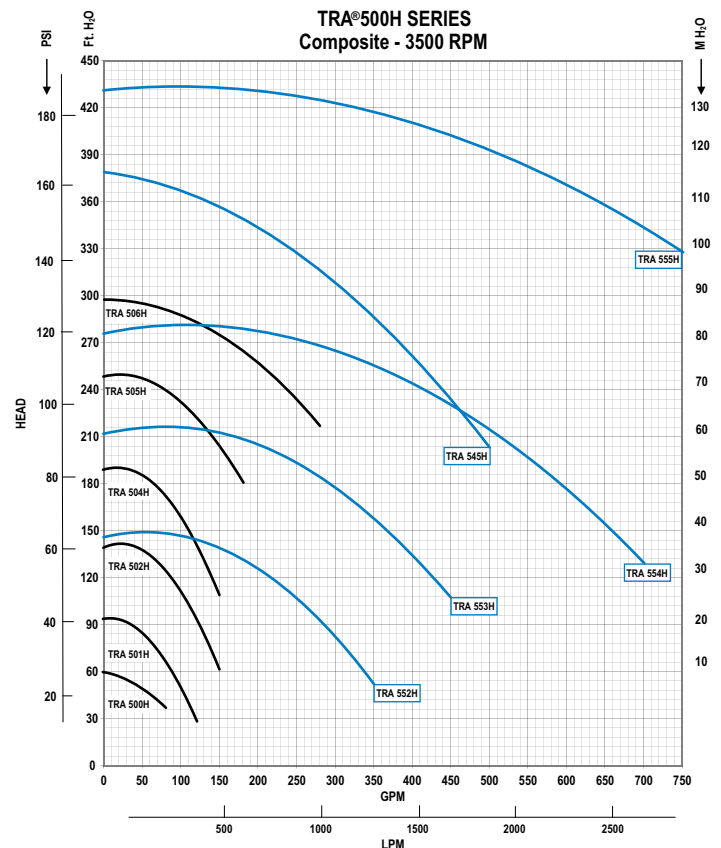
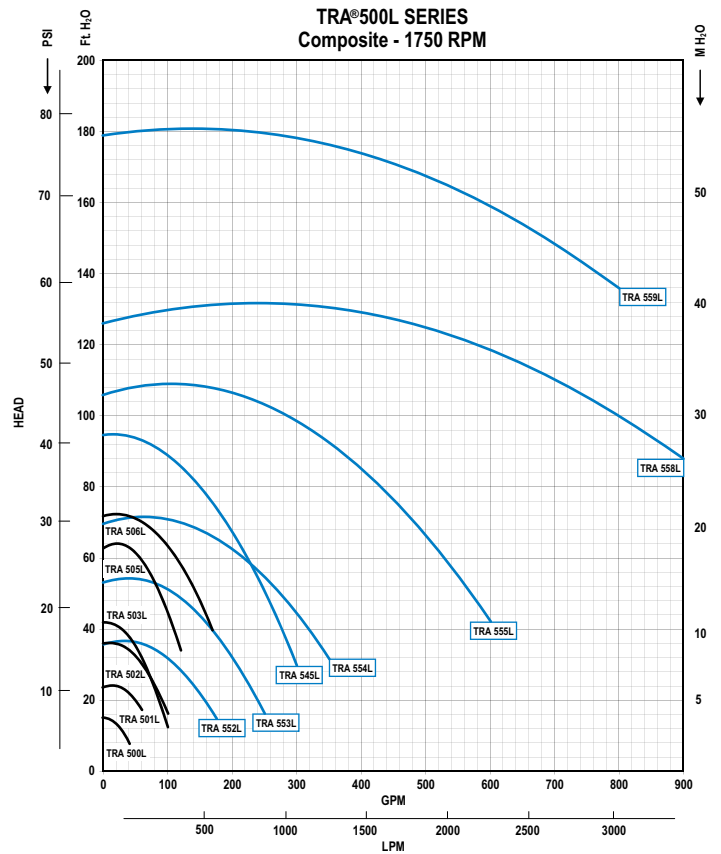
The volute-style housings of the TRA[®]55 and 54 models are for applications that require steady discharge pressures at higher capacities over a wide range of flows.



TRA®500 Series Flow Ratings

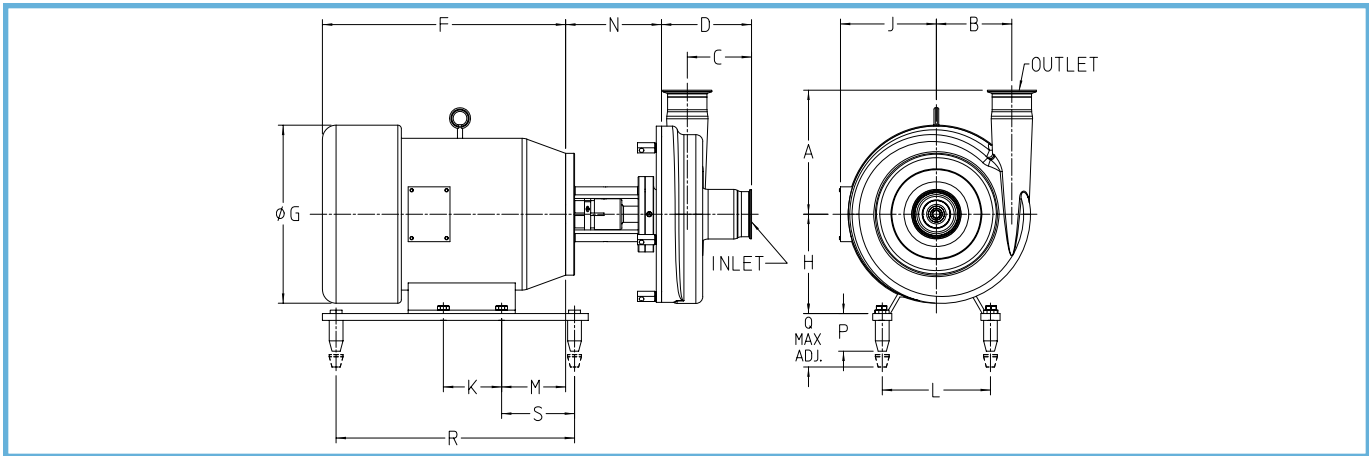
Model	Flow Range 1750 RPM	Pressure Range	Flow Range 3500 RPM	Pressure Range
TRA®500	2 to 40 GPM	4 to 6.5 PSI	4 to 80 GPM	13 to 25 PSI
	0.5 to 9.4 M³/hr.	0.3 to 0.4 BAR	0.9 to 18.8 M³/hr.	0.9 to 1.7 BAR
TRA®501	5 to 60 GPM	8 to 12 PSI	9 to 120 GPM	28 to 43 PSI
	1.2 to 14.1 M³/hr.	0.5 to 0.8 BAR	2.1 to 28.2 M³/hr.	1.9 to 2.9 BAR
TRA®502	7 to 90 GPM	8 to 15 PSI	10 to 140 GPM	32 to 60 PSI
	1.6 to 21.2 M³/hr.	0.5 to 1 BAR	2.4 to 32.9 M³/hr.	2.2 to 4.1 BAR
TRA®503	10 to 100 GPM	14 to 18 PSI	N/A	N/A
	2.4 to 23.5 M³/hr.	1 to 1.2 BAR		
TRA®504	N/A	N/A	12 to 150 GPM	38 to 77 PSI
			2.8 to 35.3 M³/hr.	2.6 to 5.2 BAR
TRA®505	10 to 120 GPM	22 to 28 PSI	16 to 200 GPM	80 to 109 PSI
	2.4 to 28.2 M³/hr.	1.5 to 1.9 BAR	3.8 to 47 M³/hr.	5.4 to 7.4 BAR
TRA®506	15 to 170 GPM	23 to 34 PSI	25 to 300 GPM	88 to 130 PSI
	3.5 to 40 M³/hr.	1.6 to 2.3 BAR	5.9 to 71 M³/hr.	6 to 8.8 BAR
TRA®552	15 to 175 GPM	8 to 16 PSI	25 to 350 GPM	33 to 65 PSI
	3.5 to 41.1 M³/hr.	0.5 to 1.1 BAR	5.9 to 82.3 M³/hr.	2.2 to 4.4 BAR
TRA®553	20 to 250 GPM	12 to 23 PSI	40 to 400 GPM	46 to 94 PSI
	4.7 to 59 M³/hr.	0.8 to 1.6 BAR	9.4 to 94 M³/hr.	3.1 to 6.4 BAR
TRA®554	25 to 350 GPM	15 to 30 PSI	50 to 700 GPM	87 to 132 PSI
	5.9 to 82.3 M³/hr.	1 to 2 BAR	11.8 to 165 M³/hr.	5.9 to 9 BAR
TRA®545	25 to 275 GPM	22 to 42 PSI	50 to 450 GPM	88 to 165 PSI
	5.9 to 64.6 M³/hr.	1.5 to 2.9 BAR	11.8 to 106 M³/hr.	6 to 11.2 BAR
TRA®555	60 to 600 GPM	27 to 47 PSI	50 to 600 GPM	110 to 190 PSI
	14.1 to 141 M³/hr.	1.8 to 3.2 BAR	11.8 to 140 M³/hr.	7.5 to 12.9 BAR
TRA®558	100 to 900 GPM	40 to 55 PSI	N/A	N/A
	23.5 to 212 M³/hr.	2.7 to 3.7 BAR		
TRA®559	100 to 800 GPM	57 to 78 PSI	N/A	N/A
	23.5 to 188 M³/hr.	3.9 to 5.3 BAR		

TRA®500 Performance Curves



Wright Pump's solid design of the TRA®500 Series and use of only 316L stainless steel provides you the operational reliability, low noise and unsurpassed performance you've come to expect in an industry leader. We comply with and support all applicable industry standards for operation, cleanliness, and design.

Performance curves shown are based on tests using 70°F water. A tolerance of +/- 5% applies to all figures. Refer to individual curves for detailed information. Contact factory for different conditions.



Dimensions: Pump

MODEL	INLET in (mm)	OUTLET in (mm)	A in (mm)	B in (mm)	C in (mm)	D in (mm)
TRA®500	1.50 (40)	1.50 (40)	4.30 (110)	1.75 (45)	4.31 (110)	5.00 (127)
TRA®501	2.00 (50)	1.50 (40)	5.69 (145)	2.25 (57)	4.44 (113)	5.25 (133)
TRA®502	2.00 (50)	1.50 (40)	6.69 (170)	3.13 (79)	4.44 (113)	5.13 (130)
TRA®503	2.00 (50)	1.50 (40)	6.69 (170)	3.13 (79)	4.44 (113)	5.13 (130)
TRA®504	2.50 (65)	2.00 (50)	7.69 (195)	3.75 (95)	4.00 (102)	5.00 (127)
TRA®505	2.50 (65)	2.00 (50)	7.69 (195)	3.75 (95)	4.00 (102)	5.00 (127)
TRA®506	2.50 (65)	2.00 (50)	7.88 (200)	3.69 (94)	4.25 (108)	5.13 (130)
TRA®552	2.50 (65)	2.00 (50)	7.50 (190)	3.13 (79)	4.63 (117)	6.00 (152)
TRA®553	2.50 (65)	2.00 (50)	7.50 (190)	3.75 (95)	4.56 (116)	6.00 (152)
TRA®554	3.00 (75)	2.50 (65)	8.25 (210)	4.50 (114)	4.63 (117)	6.00 (152)
TRA®545	3.00 (75)	2.00 (50)	8.25 (210)	5.50 (140)	4.69 (119)	5.88 (149)
TRA®555	3.00 (75)	2.50 (65)	9.06 (230)	5.50 (140)	4.69 (119)	6.25 (159)
TRA®558	4.00 (100)	4.00 (100)	9.88 (250)	6.69 (170)	4.31 (110)	6.25 (159)
TRA®559	4.00 (100)	4.00 (100)	9.88 (250)	6.69 (170)	4.31 (110)	6.25 (159)

NOTE:

- (1) Motor dimensions may vary by manufacturer.
- (2) Pump dimensions are based on clamp fittings. Consult factory for other fitting options.
- (3) Dimensions based on NEMA standards and Baldor motor data.

Dimensions: Motor

MOTOR HP		MOTOR FRAME	F in (mm)	G in (mm)	H in (mm)	J in (mm)	K in (mm)	L in (mm)	M in (mm)	N in (mm)	P (MIN) in (mm)	Q (ADJ.) in (mm)
1750 RPM	3500 RPM											
0.5	0.5	56C	9.31 (237)	6.88 (175)	3.50 (89)	5.00 (127)	3.00 (76)	4.88 (124)	2.75 (70)	6.38 (162)	4.63 (118)	to 6.13 (156)
0.75	0.75	56C	9.31 (237)	6.88 (175)	3.50 (89)	5.00 (127)	3.00 (76)	4.88 (124)	2.75 (70)	6.38 (162)	4.63 (118)	to 6.13 (156)
1.0	1.0	56C	9.31 (237)	6.88 (175)	3.50 (89)	5.00 (127)	3.00 (76)	4.88 (124)	2.75 (70)	6.38 (162)	4.63 (118)	to 6.13 (156)
N/A	1.5	56C	9.31 (237)	6.88 (175)	3.50 (89)	5.00 (127)	3.00 (76)	4.88 (124)	2.75 (70)	6.38 (162)	4.63 (118)	to 6.13 (156)
1.5	N/A	145TC	11.25 (286)	7.19 (183)	3.50 (89)	5.25 (133)	5.00 (127)	5.50 (140)	2.25 (57)	6.38 (162)	4.63 (118)	to 6.13 (156)
2.0	2.0	145TC	11.25 (286)	7.19 (183)	3.50 (89)	5.25 (133)	5.00 (127)	5.50 (140)	2.25 (57)	6.38 (162)	4.63 (118)	to 6.13 (156)
N/A	3.0	145TC	11.25 (286)	7.19 (183)	3.50 (89)	5.25 (133)	5.00 (127)	5.50 (140)	2.25 (57)	6.38 (162)	4.63 (118)	to 6.13 (156)
3.0	N/A	182TC	12.31 (313)	8.50 (216)	4.50 (114)	5.88 (149)	4.50 (114)	7.50 (191)	2.75 (70)	7.69 (195)	4.63 (118)	to 6.13 (156)
5.0	5.0	184TC	12.31 (313)	8.50 (216)	4.50 (114)	5.88 (149)	5.50 (140)	7.50 (191)	2.75 (70)	7.69 (195)	4.63 (118)	to 6.13 (156)
N/A	7.5	184TC	15.19 (386)	8.50 (216)	4.50 (114)	5.88 (149)	5.50 (140)	7.50 (191)	2.75 (70)	7.69 (195)	4.63 (118)	to 6.13 (156)
7.5	7.5	213TC	12.31 (313)	10.19 (259)	5.25 (133)	7.38 (187)	5.50 (140)	8.50 (216)	3.50 (89)	7.69 (195)	4.63 (118)	to 6.13 (156)
N/A	10.0	215TC	12.31 (313)	10.19 (259)	5.25 (133)	7.38 (187)	7.00 (178)	8.50 (216)	3.50 (89)	7.69 (195)	4.63 (118)	to 6.13 (156)
10.0	15.0	215TC	16.06 (408)	10.19 (259)	5.25 (133)	7.38 (187)	7.00 (178)	8.50 (216)	3.50 (89)	7.69 (195)	4.63 (118)	to 6.13 (156)
15.0	N/A	254TC	19.75 (502)	13.25 (337)	6.25 (159)	9.63 (245)	8.30 (210)	10.00 (254)	4.25 (108)	7.69 (195)	4.63 (118)	to 6.13 (156)
20.0	20.0	256TC	19.75 (502)	13.25 (337)	6.25 (159)	9.63 (245)	10.00 (254)	10.00 (254)	4.25 (108)	7.69 (195)	4.63 (118)	to 6.13 (156)
25.0	N/A	284TC	23.00 (584)	14.19 (360)	7.00 (178)	13.13 (333)	9.50 (241)	11.00 (279)	4.75 (121)	7.69 (195)	4.63 (118)	to 6.13 (156)
N/A	25.0	284TSC	23.00 (584)	14.19 (360)	7.00 (178)	13.13 (333)	9.50 (241)	11.00 (279)	4.75 (121)	7.69 (195)	4.63 (118)	to 6.13 (156)
30.0	N/A	286TC	23.00 (584)	14.19 (360)	7.00 (178)	13.13 (333)	11.00 (279)	11.00 (279)	4.75 (121)	7.69 (195)	4.63 (118)	to 6.13 (156)
N/A	30.0	286TSC	23.00 (584)	14.19 (360)	7.00 (178)	13.13 (333)	11.00 (279)	11.00 (279)	4.75 (121)	7.69 (195)	4.63 (118)	to 6.13 (156)
40.0	N/A	324TC	25.00 (635)	16.13 (410)	8.00 (203)	17.13 (359)	10.50 (267)	12.50 (318)	5.25 (133)	8.50 (216)	4.63 (118)	to 6.13 (156)
N/A	40.0	324TSC	25.00 (635)	16.13 (410)	8.00 (203)	17.13 (359)	10.50 (267)	12.50 (318)	5.25 (133)	8.50 (216)	4.63 (118)	to 6.13 (156)
50.0	N/A	326TC	25.00 (635)	16.13 (410)	8.00 (203)	17.13 (359)	12.00 (305)	12.50 (318)	5.25 (133)	8.50 (216)	4.63 (118)	to 6.13 (156)
N/A	50	326TSC	25.00 (635)	16.13 (410)	8.00 (203)	17.13 (359)	12.00 (305)	12.50 (318)	5.25 (133)	8.50 (216)	4.63 (118)	to 6.13 (156)