



OSMONICS

AS Series

Tonkaflo® Pumps



AS SERIES

An all stainless steel series of pumps for the toughest industrial applications

■ Tonkaflo AS Pumps

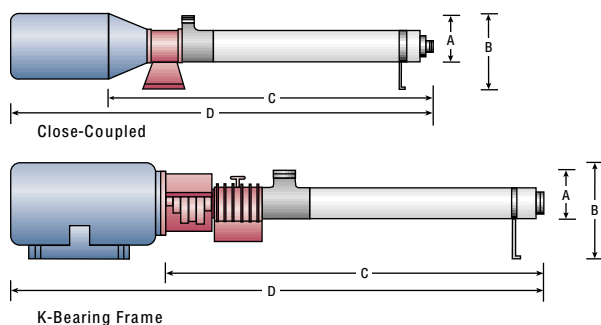
The new AS Series combines the benefits of TONKAFLO, the industry-leading pump, with the durability of all stainless steel construction. The AS Series is a multi-stage, centrifugal pump with an all stainless steel liquid end mounted on a high thrust bearing frame. Engineered to be efficiently driven by a standard motor, each of the AS Series pumps offers dependable performance and long life. And with over 200 standard models, there is an AS Series pump to fit almost any 50 Hz or 60 Hz application.

Especially designed to meet tough industrial demands, AS Series pumps tolerate the most punishing applications and harshest environments. Ideal for membrane system applications, AS Series pumps also excel in industrial boost applications such as water soluble machine coolants, sanitizing systems and higher temperature water recirculation.

■ Features and Benefits

- z **All Stainless Steel Construction** makes AS Series pumps more durable and less susceptible to operator error. AS Series pumps are also chemically compatible with hydrocarbons, and can perform within a greater temperature range than the standard TONKAFLO SS Series.
- z **Fabricated Sheet Metal Stages** require less maintenance, and eliminate the need to balance pump impellers. The end result is smoother operation, less vibration and longer pump life.
- z **Separate Bearing Frame** increases pump reliability and life because there is no thrust load on the motor. In addition, this feature allows AS Series pumps to be powered by standard motors.
- z **Modular Liquid End** allows service of the mechanical seal without disassembling the liquid end of the pump. The AS Series' modular design also facilitates service of both pump and bearing frame, and permits design flexibility when positioning piping.
- z **Industry Standard Mechanical Seal** on pump inlet delivers higher boost pressure capacity and longer seal life, and simplifies the specifying and finding of replacement parts.
- z **Victaulic Connections** reduce piping stress and make the installation of AS Series pumps easier.

Pump Specifications



Close-Coupled Pumps

Model	A	B	C	D
AS400-Inches	10.0	76	19.5-72.8	29.0-87.3
(mm)	(101.6)	(193.0)	(495.3-1849.1)	(736.6-2217.4)
AS1600	4.0	76	19.5-64.5	29.0-79.0
(mm)	(101.6)	(193.0)	(495.3-1638.3)	(736.6-2006.6)
AS2500	4.0	76-9.5	19.5-66.25	29.0-83.5
(mm)	(101.6)	(193.0-241.3)	(495.3-1682.8)	(736.6-2120.9)
AS4000	4.0	8.2-9.5	29.0-101.3	38.5-118.5
(mm)	(101.6)	(208.3-241.3)	(736.6-2573.0)	(977.9-3009.9)
AS8000	5.4	8.8-10.5	28.8-44.8	42.8-66.3
(mm)	(137.2)	(223.5-266.7)	(731.5-1137.9)	(1087.1-1684.0)
AS13500	5.4	8.8-10.5	32.3-51.5	46.8-73.0
(mm)	(137.2)	(223.5-266.7)	(820.4-1308.1)	(1188.7-1854.2)
AS21000	5.6	10.8	33.5-41.3	50.8-62.8
(mm)	(142.2)	(274.3)	(850.9-1049.0)	(1290.3-1595.1)

K-Bearing Frames

Model	A	B	C	D
AS800-Inches	6.0	10.5-11.3	57.6-71.2	78.2-94.8
(mm)	(152.4)	(266.7-287)	(1463-1808.5)	(1986.3-2407.9)
AS13500	6.0	10.5-12.3	64.0-89.5	84.6-114.8
(mm)	(152.4)	(266.7-312.4)	(1625.6-2273.3)	(2148.8-2915.9)
AS21000	6.3	11.5-13.5	51.2-102.1	73.3-129.0
(mm)	(160)	(292.1-342.9)	(1300.5-2593.3)	(1861.8-3276.6)
AS3900	6.6	12.5-15.5	44.3-89.0	63.1-119.1
(mm)	(167.6)	(317.5-393.7)	(1602.7-2260.6)	(1602.7-3025.1)

For 50 Hz and specific performance data please see individual performance curves. Dimensions vary by model.

General Specifications

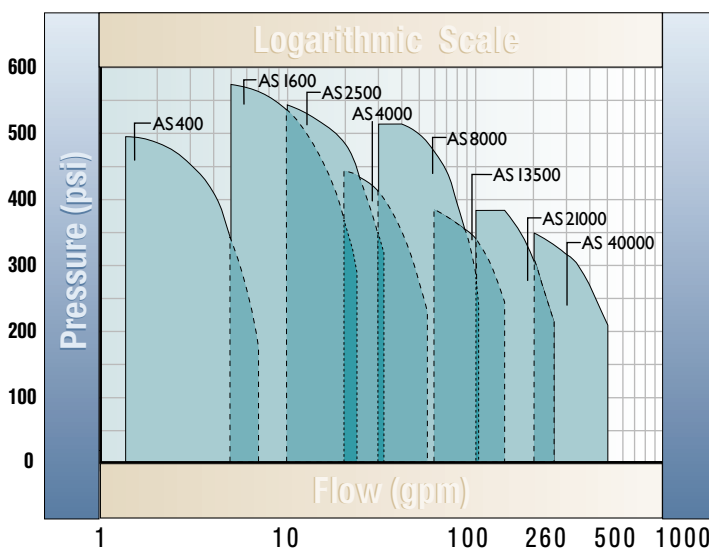
Standard Models Available:

60 Hz: (6) 400	50 Hz: (5) 400
(6) 1600	(6) 1600
(6) 2500	(5) 2500
(6) 4000	(7) 4000
(7) 8000	(8) 8000
(5) 13500	(6) 13500
(6) 21000	(5) 21000
(11) 40000	(6) 40000

For More Information:

Call **Osmonics Process Water Group** at (952) 933-2277 or (888) 898-6766, or visit www.osmonics.com

Performance Curve (60Hz)



General Specifications (continued)

Standard Models:

Motor: Standard Air-Cooled NEMA Motors (3500 RPM)
 Mounting: Horizontal (all), Vertical (limited)
 Capacity: 1.4 to 500 gpm (0.32 to 113.5m³/hr)
 Pressures: up to 535 psid (36.9 bar)
 Total Discharge Head Pressure: up to 1000 psig (69.0 bar)
 Maximum Operating Temperature: 200°F (93°C) (limited flow range)

Materials of Construction:

Pump Shell304SS
 Diffusers and Impellers304SS
 Shaft304SS
 Discharge Housing304/316SS
 Inlet Housing304/316SS
 Seal ElastomersStandard: Buna-N
 Optional: EPDM, Viton*/40K: Teflon*
 Shaft Bearings & Stage SealsStandard: Buna-N
 Optional: Teflon*/40K: Teflon*
 Mechanical SealJohn Crane
 Standard: Buna-N, Carbon-Ceramic Seal

Connections:

1.25-inch Victaulic (400-2500 Series)
 2.0-inch Victaulic-Inlet, 1.5-inch Victaulic-Discharge (4000 Series)
 3.0-inch Victaulic (8000, 13500 Series)
 4.0-inch Victaulic-Inlet, 3.0-inch Victaulic-Discharge (21000 Series)
 4.0- or 6.0-inch Victaulic-Inlet, 4.0-inch Victaulic-Discharge (39000 Series)

Power**:

60 Hz - 3 phase (208-230/460 volt)
 60 Hz - 1 phase (115/208-230 volt)
 50 Hz - 3 phase (190/380 volt)
 50 Hz - 1 phase (110/220 volt)

* Viton and Teflon are trademarks of E.I. DuPont de Nemours and Company, Inc.

** 575 volt and 380 volt 60Hz as well as 220 and 415 volt 50Hz are available on request.



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