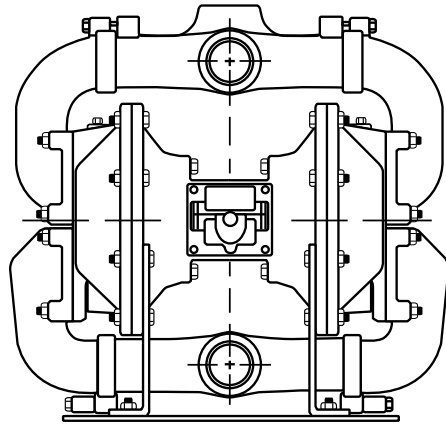


WARREN RUPP®

Quality System
ISO9001 Certified

Environmental
Management System
ISO14001 Certified

IDEX
FLUID & METERING



FLAP VALVE TSA2-A TYPE 5

**Air-Operated
Double Diaphragm
Food Grade Pump**

ENGINEERING, PERFORMANCE
& CONSTRUCTION DATA



II 2GD c T5

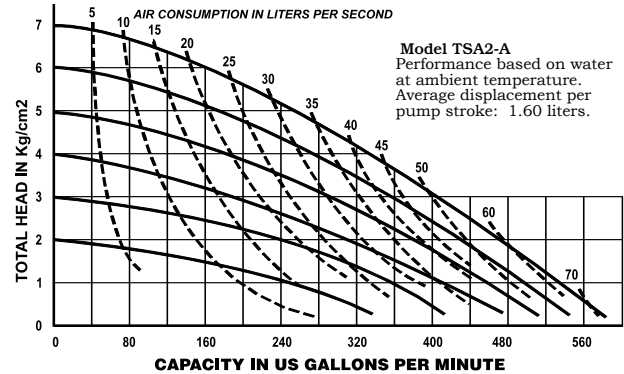
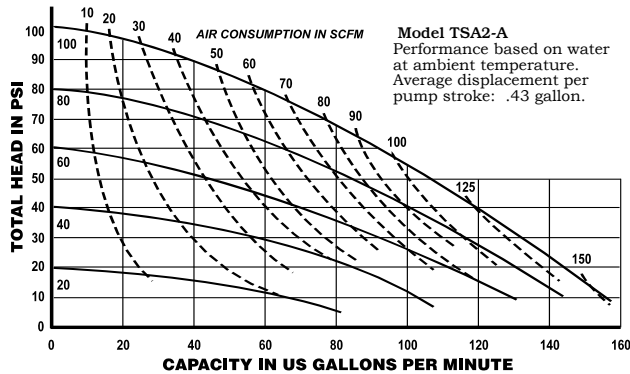


INTAKE/DISCHARGE PIPE SIZE 2½" Sanitary Clamp Fitting	CAPACITY 0 to 140 gallons per minute (0 to 530 liters per minute)	AIR VALVE No-lube, no-stall design.	SOLIDS-HANDLING Up to nearly 2" (50mm)	HEADS UP TO 125 psi or 289 ft. of water (8.8 Kg/cm ² or 88 meters)
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PERFORMANCE CURVES

pumps are designed to be powered **only** by compressed air
Temperature Limit: 190 °F - 88 °C MAXIMUM

Food Grade Pumps are designed for food, pharmaceutical, or cosmetic applications where USDA acceptability is not essential, but FDA Accepted materials are needed.



MATERIALS OF CONSTRUCTION

TSA2-A Type	Manifold Porting			Manifold Elbow	Outer Chamber	Inner Chamber	Outer Diaphragm Plate	Inner Diaphragm Plate	Intermediate Housing	Diaphragm Rod	Valve Seat	Hardware	Diaphragm	Flap Valve Material	Seat Gasket	Manifold Gasket Sealing Rings	Shipping Wt. (lbs)
	Top	Side	Bottom														
DF-5-SW			X	SS	SS	AL 380DL White Epoxy Coated	316SS	PS	356-T6AL White Epoxy Coated	416SS	316SS	SS	WN	WN	WN	WN	133

Meanings of Abbreviations:

AL = Aluminum
PS = Plated Steel

DC = Die Cast
SS = Stainless Steel

WN = FDA Accepted White Nitrile

Available Parts Kits:

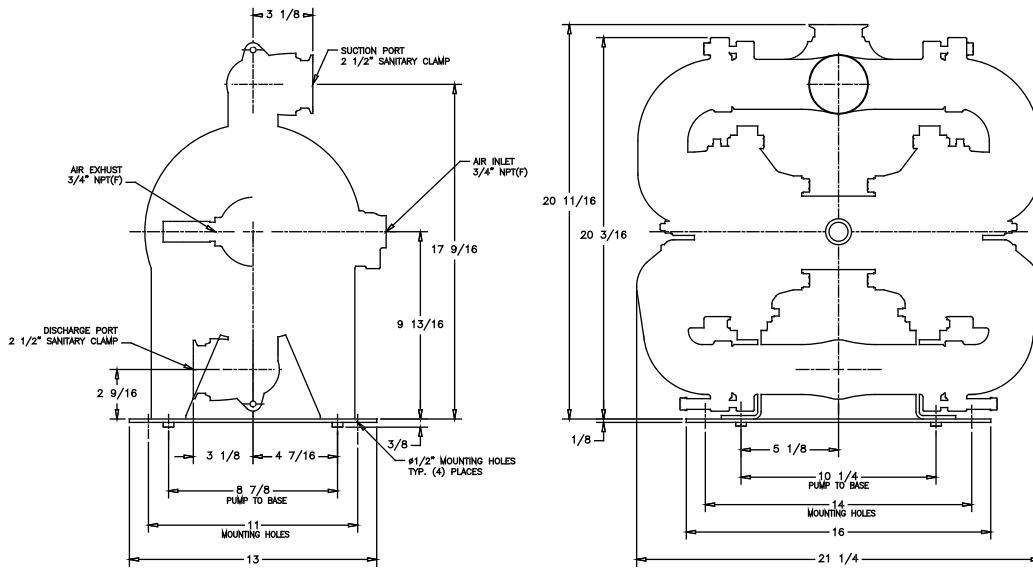
Air End Kit:
No. 476-100-000

Wetted End Kit:
No. 476-040-366

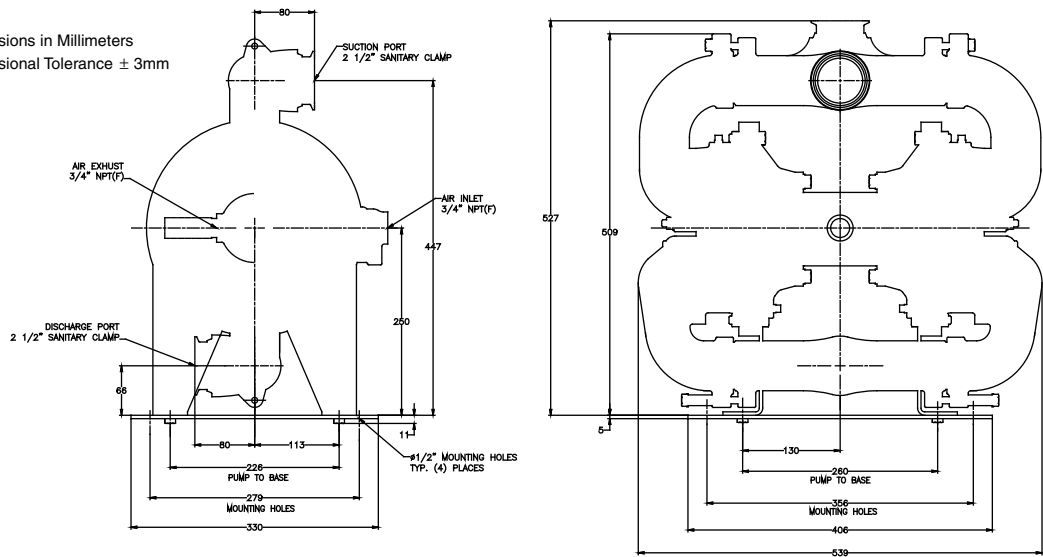
TSA2-A FLAP VALVE Food Grade Pump

MATERIALS	Operating Temperatures	
	Maximum*	Minimum*
FDA Accepted White Nitrile General purpose, oil-resistant. Shows good solvent, oil, water and hydraulic fluid resistance. Should not be used with highly polar solvents like acetone and MEK, ozone, chlorinated hydrocarbons and nitro hydrocarbons.	190°F	-10°
	88°C	-23°
CF8M Stainless Steel equal to or exceeding specification ASTM-A743 for corrosion resistant iron chromium, iron chromium nickel, and nickel based alloy castings.		
For specific applications, always consult "Chemical Resistance Chart", Technical Bulletin .	*Definite reduction in service life. **Minimal reduction in service life at ends of range.	

Dimensions in Inches
Dimensional Tolerance $\pm 1/8"$



Dimensions in Millimeters
Dimensional Tolerance $\pm 3\text{mm}$



3/4" NPT(F) AIR INLET PORT • 3/4" NPT (F) AIR EXHAUST PORT (NOT SHOWN)

Specifications are subject to improvement without notice.