

Air-Operated Double Diaphragm Pumps



3" TC-X801 Series

The TC-X801 Series pumps offer excellent flow rates and an updated heavy-duty body design. The pumps can operate with variable air pressures and are suited for both start/stop and fully continuous duty pumping applications. They can easily handle high pressure and long discharge piping.

Maximum Flow Rate: 251 GPM (950 LPM)
Maximum Discharge Head: 280 FT. (85m)
Available in: Stainless Steel, Aluminum, Cast Iron, Polypropylene
Spool valve type: Looped C® Spring Valve
Certification: CE, ATEX, FDA (SS models)



SPECIFICATIONS						
Metallic Material Code*	A"X"	S"X"	F"X"	AT	ST	FT
Max Flow Rate	251 GPM (950 LPM)			169.1 GPM (640 LPM)		
Max Air Pressure	125 PSI (0.85 MPa)			100 PSI (0.7 MPa)		
Max Air Consumption	282.6 scfm (8000 L/min)			264.9 scfm (7500 L/min)		
Supply Air Pressure Range ¹	29 -125 PSI (0.2 - 0.85 MPa)			29 -100 PSI (0.2 - 0.7 MPa)		
Liquid Discharge Volume per cycle	230 oz (6800 mL)			108.2 oz (3200 mL)		
Connection Suction x Discharge	3" NPT / 3" ANSI flange 150 lb					
Weight (NPT)	129 lbs (58.5 kg)	269 lbs (122 kg)		129 lbs (58.5 kg)	269 lbs (122 kg)	
Weight (Flange)	137.8 lbs (62.5 kg)	289.9 lbs (131.5 kg)		137.8 lbs (62.5 kg)	289.9 lbs (131.5 kg)	

* See Chart and Model Number nomenclature on back page for materials

Note 1: A supply air pressure of 30 PSI (0.2 MPa) or more is required to operate the pump. If the supply pressure is less than 30 PSI (0.2 MPa), the pump may not operate properly.

Pump Liquid Temperature Range: NBR/CR- 32-158°F (0-70°C) TPEE/EPDM- 32-176°F (0-80°C) FKM/TPO/PTFE- 32-212°F (0-100°C)

Ambient Temperature Range: 32-158°F (0-70°C)

Slurry Recommendation: 0.39" (10 mm) or less

Viscosity Limit: Suction lift ~3000 cps (3 Pa·s) Force in ~8000 cps (8 Pa·s) (Please contact your distributor for more details)

Non-Metallic Material Code*	P"X"(-FLA)	PT (-FLA)
Max Flow Rate	216.6 GPM (820 LPM)	169.1 GPM (640 LPM)
Max Air Pressure	100 PSI (0.7 MPa)	
Max Air Consumption	264.9 scfm (7500 L/min)	
Supply Air Pressure Range ¹	29-100 PSI (0.2 - 0.7 MPa)	
Liquid Discharge Volume per cycle	230 oz (6800 mL)	108 oz (3200 mL)
Connection Suction x Discharge	3" ANSI flange 150 lb	
Weight	154.3 lbs (70 kg)	

* See Chart and Model Number nomenclature on back page for materials

Note 1: A supply air pressure of 30 PSI (0.2 MPa) or more is required to operate the pump. If the supply pressure is less than 30 PSI (0.2 MPa), the pump may not operate properly.

Pump Liquid Temperature Range: 32-140°F (0-60°C)

Ambient Temperature Range: 32-158°F (0-70°C)

Slurry Recommendation: 0.39" (10 mm) or less

Viscosity Limit: Suction lift ~3000 cps (3 Pa·s) Force in ~8000 cps (8 Pa·s) (Please contact your distributor for more details)

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WET END MATERIALS					
Code	Pump wetted parts	Diaphragm	Ball Valve/Valve Seat	Outer Diaphragm Plate	Center Body
AC	AL Alloy/AL	Neoprene™	Neoprene™	AL	AL
AN		BUNA	BUNA		
AE		EPDM	EPDM		
AV		Viton®	Viton®		
AT		PTFE	PTFE		
AH		Hytrel™	BUNA		
AS		Santoprene®	EPDM		
SC	Cast SS/SS316	Neoprene™	Neoprene™	SS316	
SN		BUNA	BUNA		
SE		EPDM	EPDM		
SV		Viton®	Viton®		
ST		PTFE	PTFE		
SH		Hytrel™	BUNA		
SS		Santoprene®	EPDM		
FC	Cast Iron	Neoprene™	Neoprene™	SS316	
FN		BUNA	BUNA		
FE		EPDM	EPDM		
FV		Viton®	Viton®		
FT		PTFE	PTFE		
FH		Hytrel™	BUNA		
FS		Santoprene®	EPDM		
PC	PPG	Neoprene™	Neoprene™ / PP	PPG (SCS13*)	
PN		BUNA	BUNA / PP		
PE		EPDM	EPDM / PP		
PV		Viton®	Viton® / PP		
PT		PTFE	PTFE / PP		
PH		Hytrel™	BUNA / PP		
PS		Santoprene®	EPDM / PP		

AL Alloy
AL
Cast SS
SS316
Cast Iron
BUNA
Neoprene™
Viton®

Aluminum Alloy (ADC12)
Aluminum (A5056)
Cast Stainless Steel (SCS14)
Stainless Steel Grade 316
Cast Iron (S45C)
Nitrile Rubber (NBR)
Chloroprene Rubber (CR)
Fluoroelastomer (FKM)

Pure Poly
PTFE
PVDF
PPG
Santoprene®
Hytrel™
EPDM
* SCS13

Pure Polypropylene
Polytetrafluoroethylene (Teflon®)
Polyvinylidene Fluoride (Kynar®)
Glass Fiber Reinforced Polypropylene
Thermoplastic PolyOlefin (TPO)
Thermoplastic Polyester Elastomer (TPEE)
Ethylene Propylene Diene Monomer (Nordel™)
Cast Stainless Steel (insert material)

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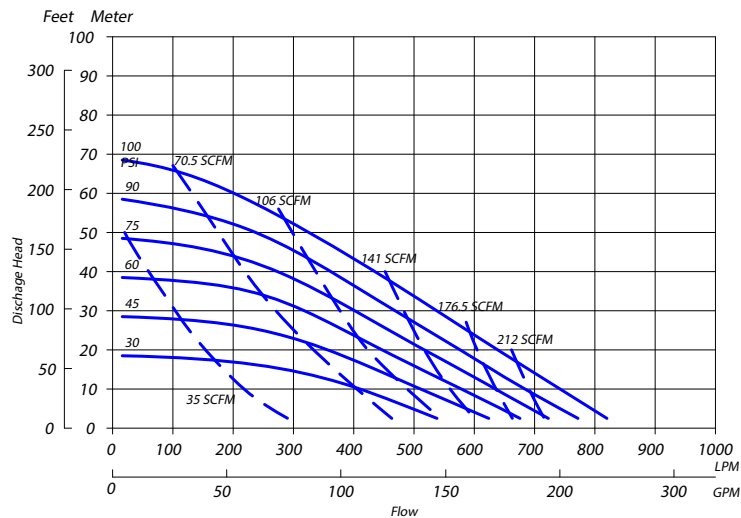


PERFORMANCE CURVES

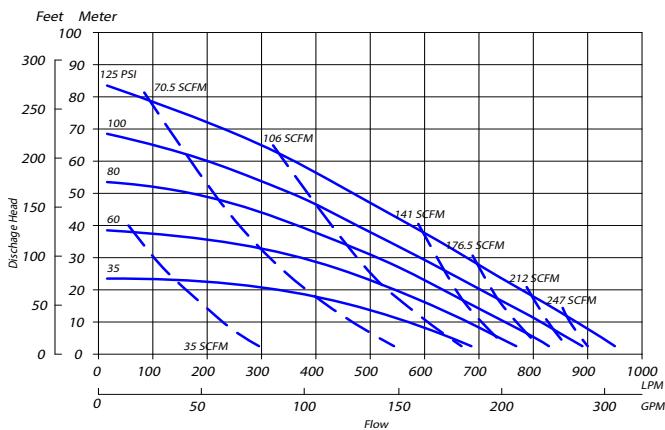
— Flow
- - - Air

Conditions:
4" (10cm) flooded suction.
Ambient temperature: 73°F (23°C)
Liquid temperature: 64-68°F (18-20°C)

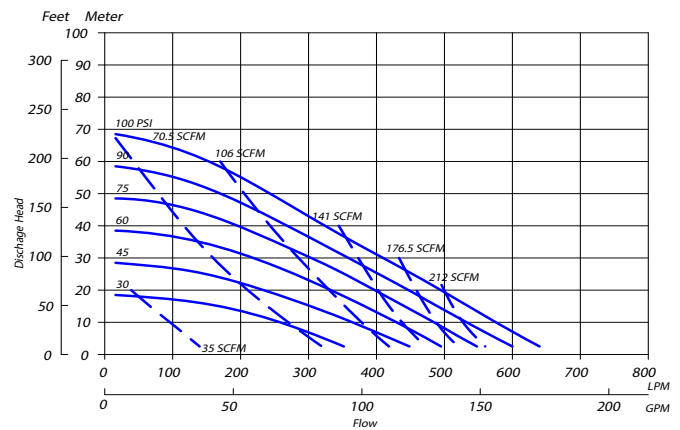
TC-X801P"X" / V"X" (except T)



TC-X801A"X"/ S"X"/ F"X" (except T)



TC-X801AT / ST / FT / PT / VT



MODEL NUMBER NOMENCLATURE

Series TC-X: TC-X 801 P T - NPT - XXXX

Pump Connection Size: 801 (3" x 3")

Pump Body Material (wetted):
A: Aluminum (ADC12) P: PPG
F: Cast Iron (S45C)
S: Cast Stainless Steel (SCS14)/SS316

Connection Type*:
NPT: Threaded FDA: Sanitary Clamp Fittings FLA: Flange
*Plastic pumps are only available with flange connection

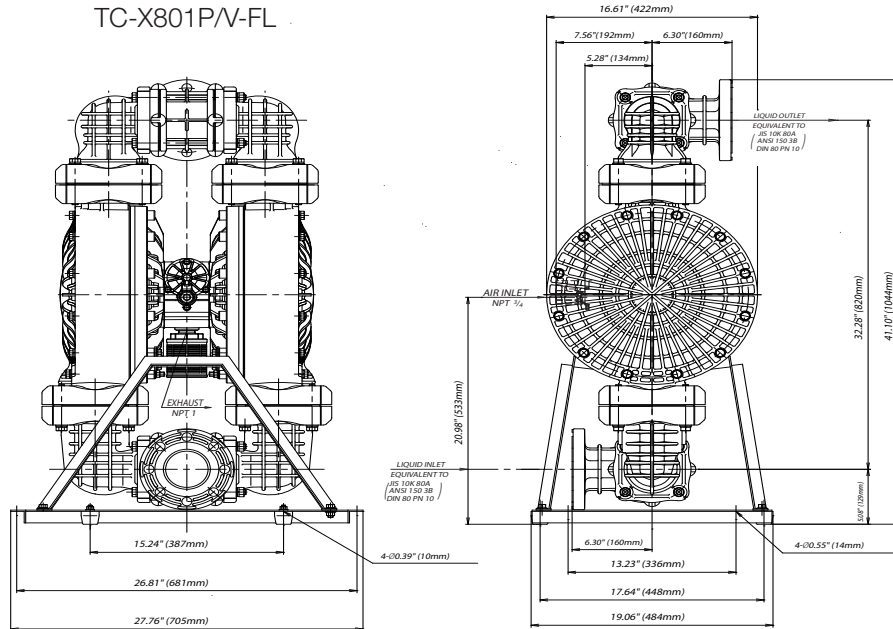
Diaphragm Material:
T: PTFE N: BUNA (NBR)
H: Hytrel™ (TPEE) V: Viton® (FKM)
S: Santoprene® (TPO) E: EPDM
C: Neoprene™ (CR)

Special options (Consult Factory)

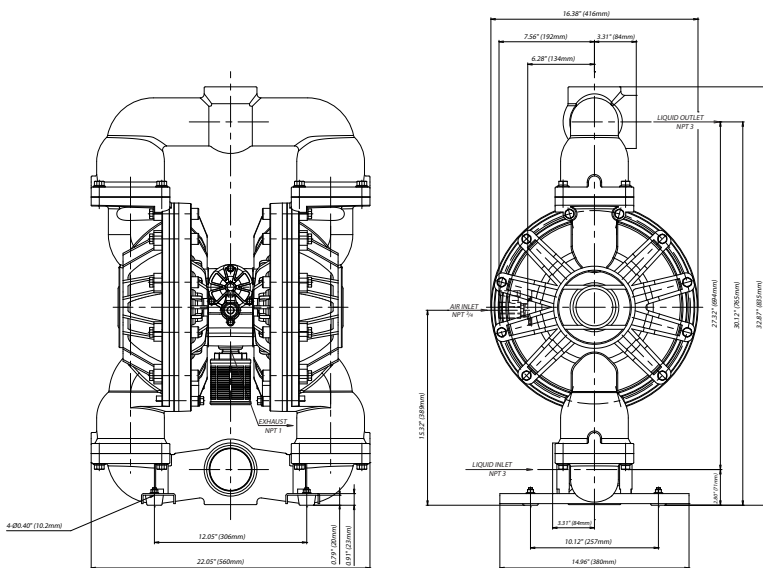
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DIMENSIONS

TC-X801P/V-FL



TC-X801A/S/F-NPT



TC-X801A/S/F-FL

