

Air-Operated Double Diaphragm Pumps



1½" TC-X400-M Series Heavy Duty Air Motor

The TC-X400-M Series pumps offer excellent flow rates and an improved heavy-duty body design fitted with the Looped C[®] Air Motor Technology. 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: 118.9 GPM (450 LPM)
 Maximum Discharge Head: 288.75 FT. (88m)
 Available in: Stainless Steel, Aluminum, Cast Iron, Glass-filled Polypropylene, PVDF
 Spool valve type: Looped C[®] Spring Valve
 Certification: CE, ATEX, FDA (SS models)

SPECIFICATIONS

Metallic Material Code*	A"X"	S"X"	F"X"	AT/AW	ST/SW	FT/FW
Max Flow Rate	118.9 GPM (450 LPM)			105.7 GPM (400 LPM)		
Max Air Pressure	125 PSI (0.85 MPa)			100 PSI (0.7 MPa)		
Max Air Consumption	130.6 scfm (3700 L/min)			148.3 scfm (4200 L/min)		
Supply Air Pressure Range ¹	30-125 PSI (0.2 - 0.85 MPa)			30-100 PSI (0.2 - 0.7 MPa)		
Liquid Discharge Volume per cycle	94 oz (2800 mL)			47 oz (1400 mL)		
Connection Suction x Discharge	1.1/2"ANSI 150lb - JIS10K 80A					
Weight (NPT)	62.8 lbs (28.5 kg)	112.4 lbs (51 kg)	62.8 lbs (28.5 kg)	112.4 lbs (51 kg)	62.8 lbs (28.5 kg)	112.4 lbs (51 kg)
Weight (Flange)	66.1 lbs (30.0 kg)	121.3 lbs (55 kg)	66.1 lbs (30.0 kg)	121.3 lbs (55 kg)	66.1 lbs (30.0 kg)	121.3 lbs (55 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 Diaphragm - 32-180°F (0-82°C) TPO/EPDM/PTFE Diaphragm - 32-212°F (0-100°C) TPEE/FKM Diaphragm - 32-248°F (0-120°C)

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

Slurry Recommendation: 0.31" (8 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*	G"X"	V"X"	GT/GW	VT/VW
Max Flow Rate	103.0 GPM (390 LPM)		95.1 GPM (360 LPM)	
Max Air Pressure	100 PSI (0.7 MPa)			
Max Air Consumption	98.8 scfm (2800 L/min)		123.5 scfm (3500 L/min)	
Supply Air Pressure Range ¹	30-100 PSI (0.2 - 0.70 MPa)			
Liquid Discharge Volume per cycle	94 oz (2800 mL)		47 oz (1400 mL)	
Connection Suction x Discharge	1.1/2"ANSI 150lb - JIS10K 80A			
Weight	61.7 lbs (28 kg)	70.5 lbs (32.0 kg)	61.7 lbs (28 kg)	70.5 lbs (32.0 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: 32-180°F (0-82°C)

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

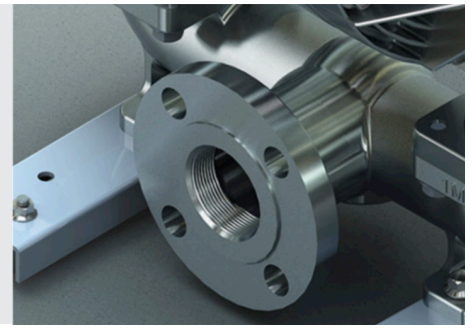
Slurry Recommendation: 0.27" (70 mm) or less

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

1½” TC-X400-M Series

THREADED FLANGE MANIFOLD

The TC-X400-M model features a standard threaded flange manifold, offering both flange and threaded connection options.



WET END MATERIALS

Code	Pump Wetted Parts	Diaphragm	Ball Valve/Valve Seat	Outer Diaphragm Plate	Center Body
AC	AL Alloy/AL	Neoprene™	Neoprene™	AL	
AN		BUNA	BUNA		
AE		EPDM	EPDM		
AV		Viton®	Viton®		
AT		PTFE	PTFE		
AW		PTFE/EPDM backup (one-piece)	PTFE		
AH		Hytrel™	BUNA		
AS		Santoprene®	EPDM		
SC		Cast SS/SS316	Neoprene™		
SN	BUNA		BUNA		
SE	EPDM		EPDM		
SV	Viton®		Viton®		
ST	PTFE		PTFE		
SW	PTFE/EPDM backup (one-piece)		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		
FW		PTFE/EPDM backup (one-piece)	PTFE		
FH		Hytrel™	BUNA		
FS		Santoprene®	EPDM		
GC		GFRPP	Neoprene™	Neoprene™ / PP	
GN	BUNA		BUNA / PP		
GE	EPDM		EPDM / PP		
GV	Viton®		Viton® / PP		
GT	PTFE		PTFE / PP		
GW	PTFE/EPDM backup (one-piece)		PTFE		
GH	Hytrel™		BUNA / PP		
GS	Santoprene®		EPDM / PP		
VE	PVDF		EPDM	EPDM / PTFE	PVDF (SCS13*)
VV		Viton®	Viton® / PTFE		
VT		PTFE	PTFE		
VW		PTFE/EPDM backup (one-piece)	PTFE		
VH		Hytrel™	BUNA / PTFE		
VS		Santoprene®	EPDM / PTFE		

AL Alloy Aluminum Alloy (ADC12)
 AL Aluminum (A5056)
 Cast SS Cast Stainless Steel (SCS14)
 SS316 Stainless Steel Grade 316
 Cast Iron Cast Iron (S45C)
 BUNA Nitrile Rubber (NBR)
 Neoprene™ Chloroprene Rubber (CR)
 Viton® Fluoroelastomer (FKM)

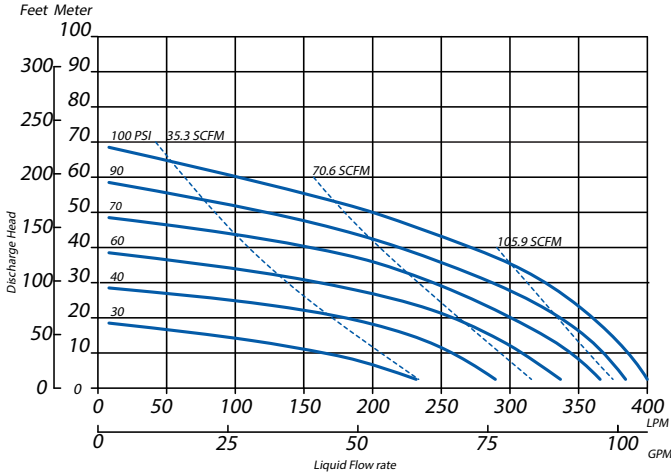
Pure Poly Pure Polypropylene
 PTFE Polytetrafluoroethylene (Teflon®)
 PVDF Polyvinylidene Fluoride (Kynar®)
 GFRPP Glass Fiber Reinforced Polypropylene
 Santoprene® Thermoplastic PolyOlefin (TPO)
 Hytrel™ Thermoplastic Polyester Elastomer (TPEE)
 EPDM Ethylene Propylene Diene Monomer (Nordel™)
 * SCS13 Cast Stainless Steel (insert material)

PERFORMANCE CURVES

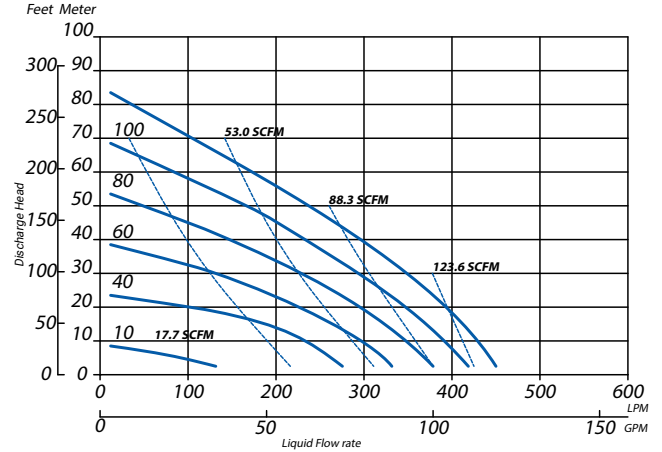
— Flow
 - - - Air

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

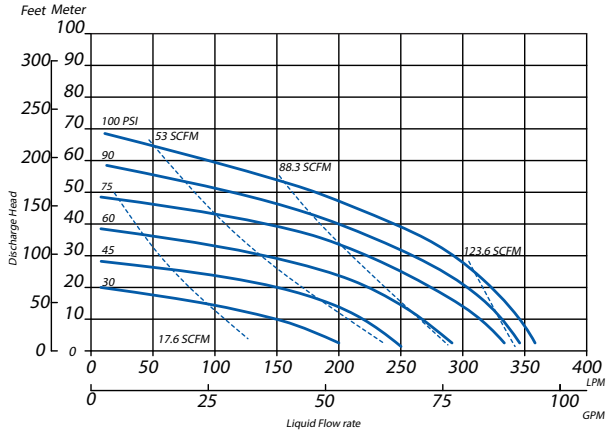
TC-X400-M AT/AW/ST/SW/FT/FW



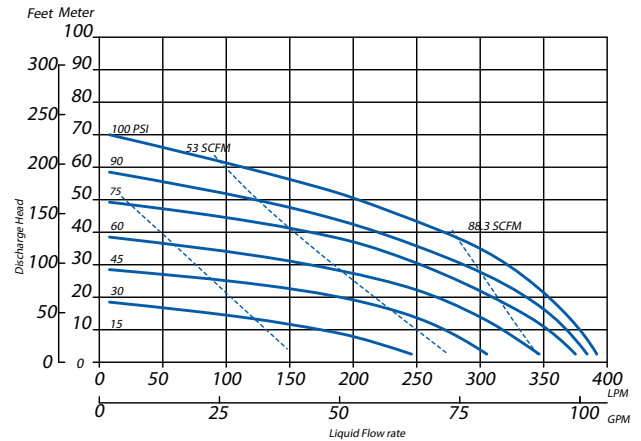
TC-X400-M A"X"/ S"X"/ F"X" (except T & W)



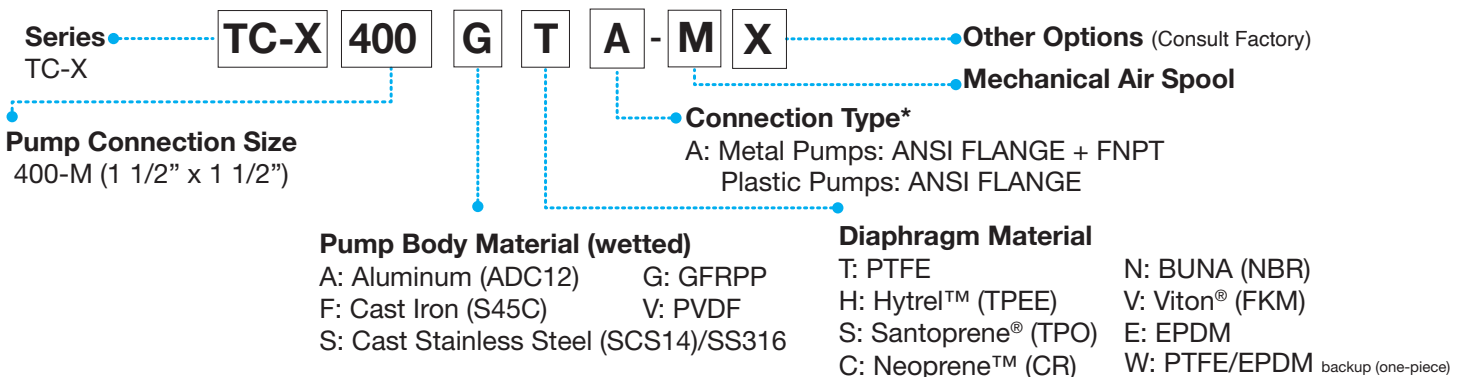
TC-X400-M GT/GW/VT/VW



TC-X400-M"G"X" / V"X" (except T & W)

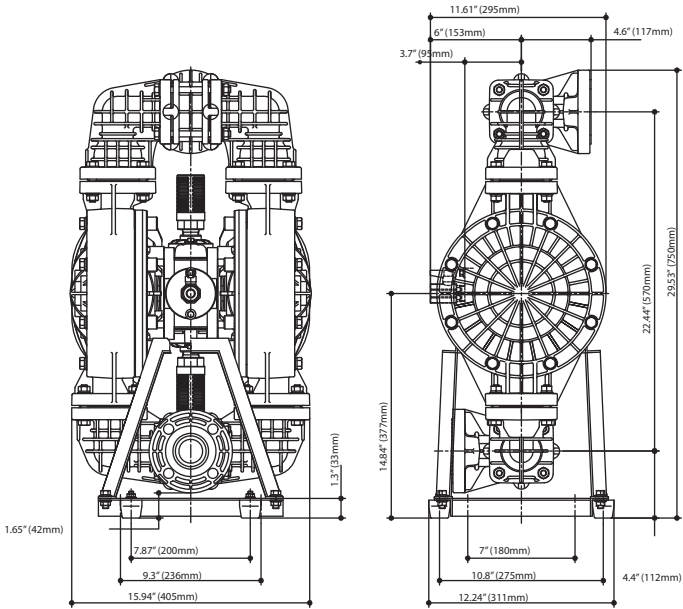


MODEL NUMBER NOMENCLATURE

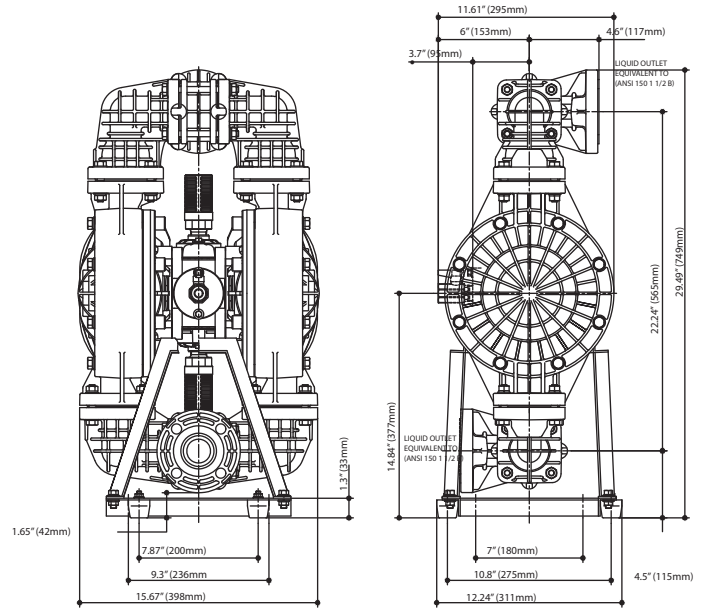


DIMENSION

TC-X400-M "P"



TC-X400-M "V"



TC-X400-M A/S/F

