

Air-Operated Double Diaphragm Pumps



2" TC-X500 Series

The TC-X500 Series pumps offer excellent flow rates and an upgraded 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: 211.4 GPM (800 LPM)
 Maximum Discharge Head: 280 FT. (85m)
 Available in: Stainless Steel, Aluminum, Cast Iron, 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	211.4 GPM (800 LPM)			158.5 GPM (600 LPM)		
Max Air Pressure	125 PSI (0.85 MPa)			100 PSI (0.7 MPa)		
Max Air Consumption	204.8 scfm (5800 L/min)			211.8 scfm (6000 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	118 oz (3500 mL)			68 oz (2000 mL)		
Connection Suction x Discharge	Combination Flange 2"ANSI 150lb - JIS10K 80A w/internal 2" NPT (F)					
Weight (NPT)	75.0 lbs (34 kg)	136.7 lbs (62 kg)	75.0 lbs (34 kg)	136.7 lbs (62 kg)	75.0 lbs (34 kg)	136.7 lbs (62 kg)
Weight (Flange)	79.4 lbs (36 kg)	147.7 lbs (67 kg)	79.4 lbs (36 kg)	147.7 lbs (67 kg)	79.4 lbs (36 kg)	147.7 lbs (67 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	171.7 GPM (650 LPM)		158.5 GPM (600 LPM)	
Max Air Pressure	100 PSI (0.7 MPa)			
Max Air Consumption	194.3 scfm (5500 L/min)		211.9 scfm (6000 L/min)	
Supply Air Pressure Range ¹	29-100 PSI (0.2 - 0.7 MPa)			
Liquid Discharge Volume per cycle	118 oz (3500 mL)		68 oz (2000 mL)	
Connection Suction x Discharge	Combination Flange 2"ANSI 150lb - JIS10K 80A w/internal 2" NPT (F)			
Weight	81.5 lbs (37 kg)	117.9 lbs (53.5 kg)	81.5 lbs (37 kg)	117.9 lbs (53.5 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: 32-180°F (0-82°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)

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™	Neoprene™	SS316	
SN		BUNA	BUNA		
SE		EPDM	EPDM		
SV		Viton®	Viton®		
ST		PTFE/EPDM backup (one piece)	PTFE		
SW			PTFE		
SH		Hytrel™	BUNA		
SS		Santoprene®	EPDM		
FC	Cast Iron	Neoprene™	Neoprene™	SS400	AL
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	GFRPP (SCS13*)	
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*)	
VW		Viton®	Viton® / PTFE		
VT		PTFE	PTFE		
VW		PTFE/EPDM backup (one piece)	PTFE		
VH		Hytrel™	BUNA / PTFE		
VS		Santoprene®	EPDM / PTFE		

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
GFRPP
Santoprene®
Hytrel™
EPDM
* SCS13

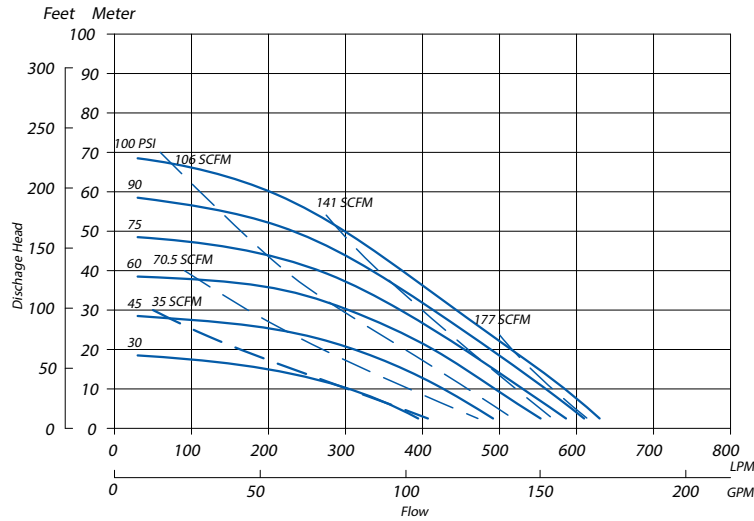
Pure Polypropylene
Polytetrafluoroethylene (Teflon®)
Polyvinylidene Fluoride (Kynar®)
Glass Fiber Reinforced Polypropylene
Thermoplastic PolyOlefin (TPO)
Thermoplastic Polyester Elastomer (TPEE)
Ethylene Propylene Diene Monomer (Nordel™)
Cast Stainless Steel (insert material)

PERFORMANCE CURVES

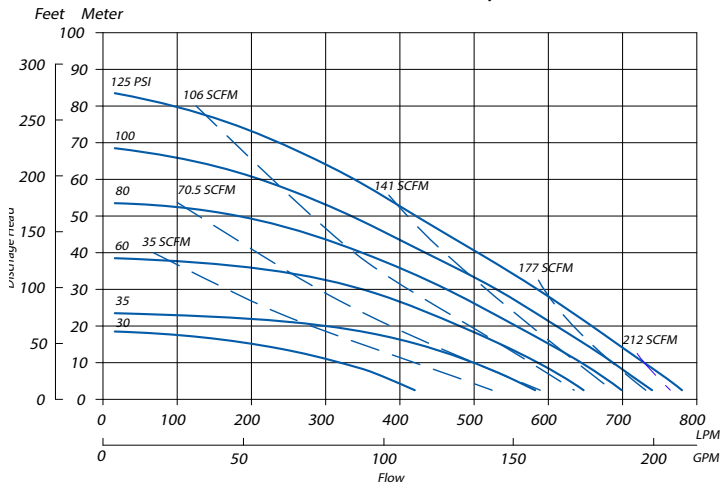
— Flow
 - - - - Air

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

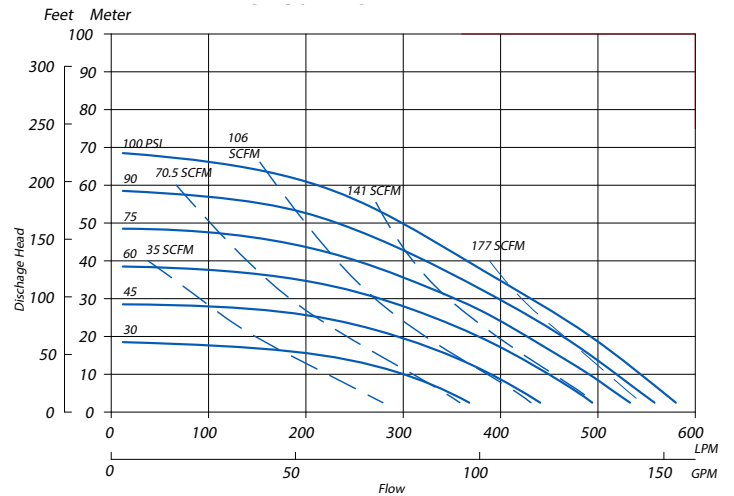
TC-X500G"X" / V"X" (except T & W)



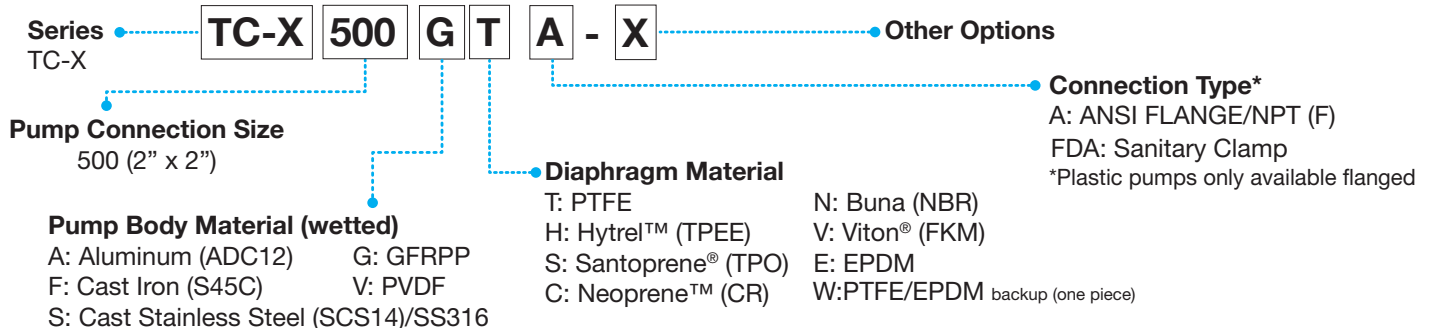
TC-X500A"X" / S"X" / F"X" (except T & W)



TC-X500AT/AW/ST/SW/FT/FW/GT/GW/VT/VW

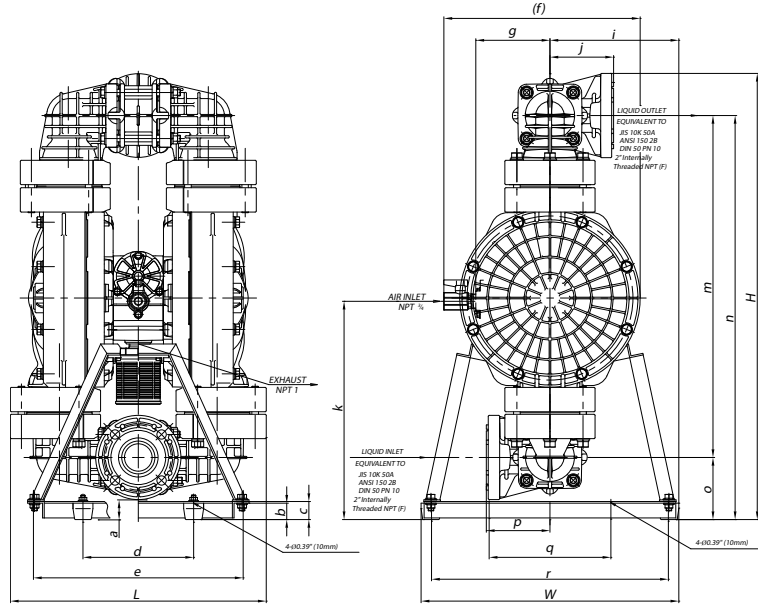


MODEL NUMBER NOMENCLATURE

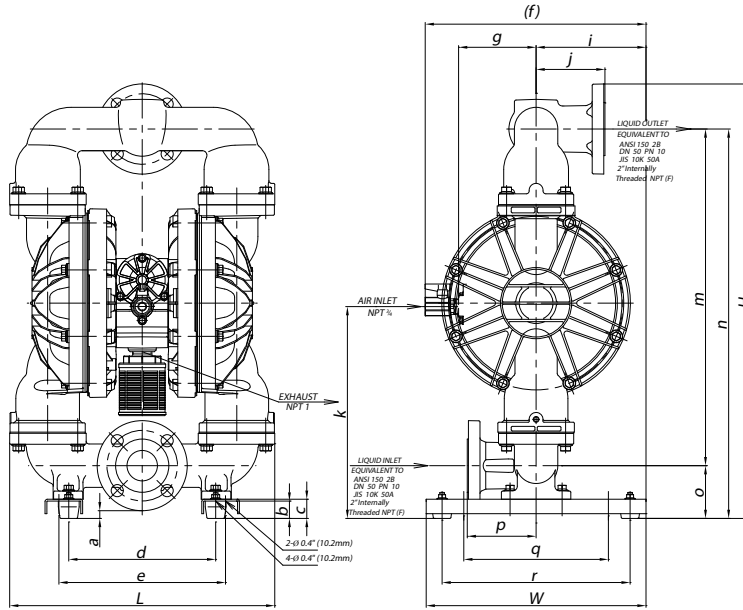


DIMENSIONS

TC-X500P/V



TC-X500A/S/F



MODEL	L	W	H	a	b	c	d	e	f	g	i	j	k	m	n	o	p	q	r
TC-X500-P-FL	18.46 (469)	18.35 (466)	32.20 (818)	1.34 (34)	1.18 (30)	1.30 (33)	7.87 (200)	14.92 (379)	13.98 (355)	9.17 (233)	4.61 (117)	15.71 (399)	24.88 (632)	29.25 (743)	4.37 (111)	4.61 (117)	8.66 (220)	16.85 (428)	
TC-X500-V-FL	18.19 (462)		32.13 (816)	1.46 (37)															4.53 (115)
TC-X500-A-FL	18.03 (458)	14.96 (380)	29.57 (751)	0.51 (13)	0.79 (20)	0.91 (23)	10.00 (254)	11.34 (288)	15.04 (382)	5.28 (134)	7.48 (190)	4.69 (119)	14.41 (366)	22.91 (582)	26.50 (673)	3.58 (91)	4.69 (119)	9.84 (250)	12.79 (325)
TC-X500-F-FL	17.95 (456)			0.20 (5)															
TC-X500-S-FL	17.95 (456)		0.20 (5)	2.28 (58)	12.76 (324)	24.84 (631)	1.93 (49)												
TC-X500-A-NPT	18.03 (458)		26.89 (683)	0.20 (5)	0.79 (20)	0.91 (23)	10.00 (254)	11.34 (288)	15.04 (382)	5.28 (134)	7.48 (190)	4.69 (119)	14.41 (366)	22.91 (582)	26.50 (673)	3.58 (91)	4.69 (119)	9.84 (250)	
TC-X500-F-NPT	17.95 (456)		26.81 (681)	0.24 (6)	0.79 (20)	0.91 (23)	10.00 (254)	11.34 (288)	15.04 (382)	5.28 (134)	7.48 (190)	4.69 (119)	14.41 (366)	22.91 (582)	26.50 (673)	3.58 (91)	4.69 (119)	9.84 (250)	
TC-X500-S-NPT	17.95 (456)		26.81 (681)	0.24 (6)	0.79 (20)	0.91 (23)	10.00 (254)	11.34 (288)	15.04 (382)	5.28 (134)	7.48 (190)	4.69 (119)	14.41 (366)	22.91 (582)	26.50 (673)	3.58 (91)	4.69 (119)	9.84 (250)	

Note: inches (mm)



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