

Air-Operated Double Diaphragm Pumps



1" TC-X253 Series (Metallic)

The TC-X253 pumps are heavy duty pumps with excellent leak resistance, exceptional flow performance and high reliability. They offer high flow rates and solids handling. Featuring the new Looped C™ Air Motor Technology.

New Air EcoRing feature (patent pending) provides lower air consumption.

Maximum Flow Rate: 58.1 GPM (220 L/Min)

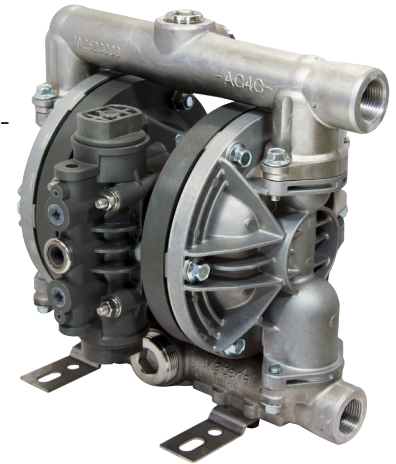
Maximum Discharge Head: 230 ft (70 m)

Maximum Solid Size: 6.5 mm

Available in: Stainless Steel, Aluminum, Cast Iron

Spool valve type: Looped C Spring Valve

Certification: CE, ATEX, FDA (SUS models)



SPECIFICATIONS						
Material Code*	A"X"	S"X"	F"X"	AT	ST	FT
Max Flow Rate	58.1 GPM (220 LPM)			50.2 GPM (190 LPM)		
Max Air Pressure	100 PSI (0.7 MPa)					
Max Air Consumption	63.5 scfm (1800 L/min)			56.5 scfm (1600 L/min)		
Supply Air Pressure Range ¹	30-100 PSI (0.2-0.7 MPa)					
Liquid Discharge Volume per cycle	27 oz (800 mL)			22 oz (650 mL)		
Connection Suction x Discharge	NPT 1" (NPT 1½" option)					
Weight	24.3 lbs (11 kg)	45.2 lbs (20.5 kg)		24.3 lbs (11 kg)	45.2 lbs (20.5 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: 32-158°F (0-70°C) [MT Models: CR/NBR Diaphragm 32-158°F (0-70°C), TPEE/EPDM Diaphragm 32-176°F (0-80°C), FKM/TPO/PTFE 32-212°F (0-100°C)]

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

Slurry Recommendation: 0.25" (6.5mm) or less

Limitation of viscosity: Suction lift ~3000 cps (3 Pa·s) Force in ~8000 cps (8 Pa·s)

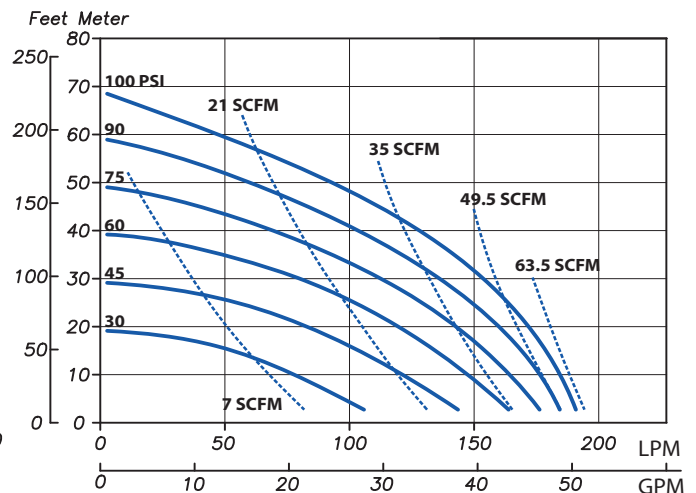
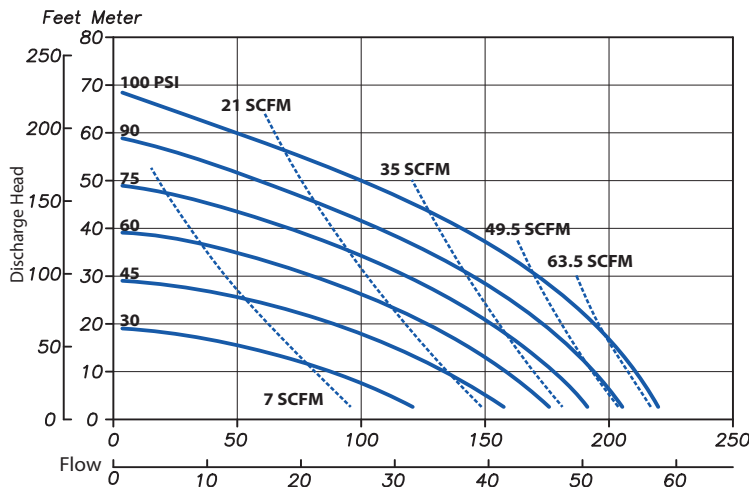
PERFORMANCE CURVES

— Flow
 - - - - Air

Conditions:
 4" (10 cm) flooded suction.
 Ambient temperature: 70°F (21°C)
 Liquid temperature: 70-73°F (21-23°C)

TC-X253A"X",S"X",F"X" (except T)

TC-X253AT, ST, FT



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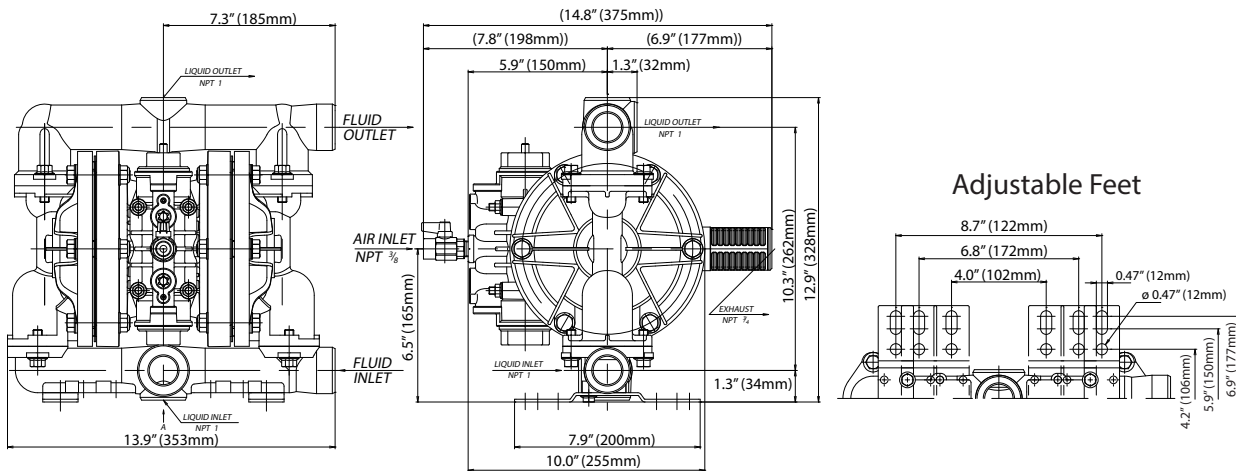
WET END MATERIALS							
Code	Pump wetted parts	Diaphragm	Ball Valve/Seat	Valve Stopper	Outer Diaphragm Plate	Center Body	
AC	AL Alloy	Neoprene™	Neoprene™	SS316	AL	PPG or AL	
AN		BUNA	BUNA				
AE		EPDM	EPDM				
AV		Viton®	Viton®				
AT		PTFE	PTFE				
AH		Hytrel™	BUNA				
AS		Santoprene®	EPDM				
SC		Cast SS	Neoprene™				Neoprene™
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				

AL Alloy
AL
Neoprene™
BUNA
Cast SS
SS316
Cast iron
PPG
PTFE
Hytrel™
Santoprene®
Viton®
EPDM

Aluminum Alloy (ADC12)
Aluminum (A5056)
Chloroprene Rubber (CR)
Nitrile Rubber (NBR)
Cast Stainless Steel (SCS14)
Stainless Steel Grade 316*
Cast Iron S45C
Glass Fiber Reinforced Polypropylene
Polytetrafluoroethylene (Teflon®)
Thermoplastic Polyester Elastomer (TPEE)
Thermoplastic PolyOlefin (TPO)
Fluoroelastomer (FKM)
Ethylene propylene diene monomer (Nordel™)

* SS316 Multiport plug material

DIMENSIONS TC-X253A,S,F



MODEL NUMBER NOMENCLATURE

Pump Connection Size
253 (1" x 1")

Center Body Material
Blank: PPG MT: Aluminum

TC-X 253 A T - [] - NPT - SP25

Spacers
Available to match competitor dimensions

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

Diaphragm Material
T: PTFE
H: Hytrel™ (TPEE)
S: Santoprene® (TPO)
C: Neoprene™ (CR)

N: BUNA (NBR)
V: Viton® (FKM)
E: EPDM

Connection Type
NPT: Threaded FDA: Sanitary Clamp Fittings



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