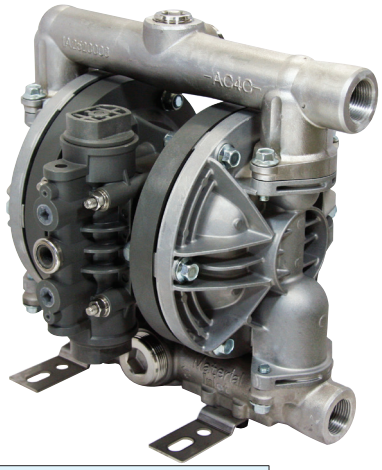
Air-Operated
Double Diaphragm Pumps

IWAKI AIR

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 (patent pending). 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: C-Spring Valve
Certification: CE, ATEX, FDA (SUS models)

Looped C® Patent Pending

Air EcoRing Patent Pending

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	70.6 scfm (2000 L/min)			63.6 scfm (1800 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)	

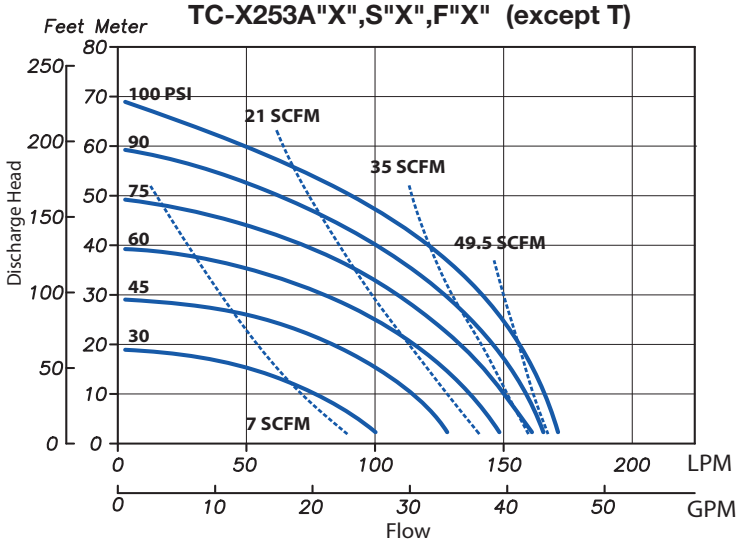
* See Chart and Model Number nomenclature on back page for materials
Note 1: A supply air pressure of 30 PSI (0.2 MPa) or more is required to operate the pump. If the supply pressure is less than 30 PSI (0.2 MPa), the pump may not operate properly.
Pump Liquid Temperature Range: 32-158°F (0-70°C)
Ambient 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

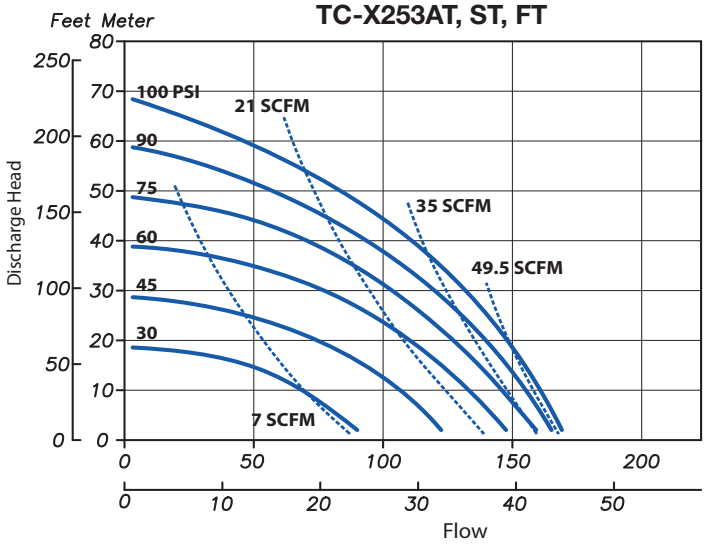
Flow
Air

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



Air-Operated
Double Diaphragm Pumps

IWAKI AIR

1” TC-X253 Series (Metallic)

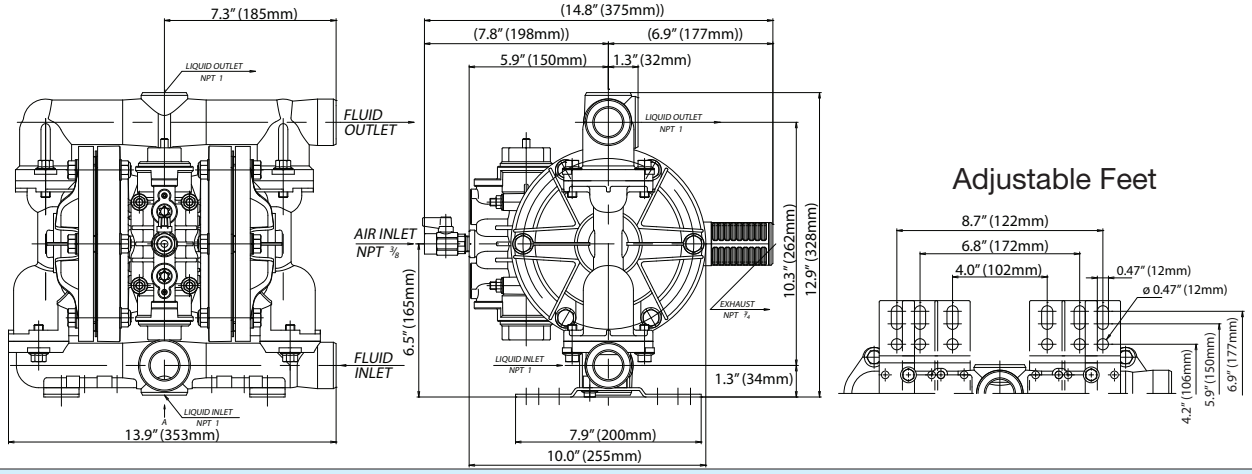
WET END MATERIALS

Code	Pump wetted parts	Diaphragm	Ball Valve/Seat	Valve Stopper	Outer Diaphragm Plate	Center Body
AC	AL Alloy	Neoprene™	Neoprene™	SS316	SS316	PPG
AN		BUNA	BUNA			
AE		EPDM	EPDM			
AV		Viton®	Viton®			
AT		PTFE	PTFE		AL	
AH		Hytrel™	BUNA		SS316	
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™			
FN		BUNA	BUNA			
FE		EPDM	EPDM			
FV		Viton®	Viton®			
FT		PTFE	PTFE			
FH		Hytrel™	BUNA			
FS		Santoprene®	EPDM			

AL Alloy	Aluminum Alloy (ADC12)
AL	Aluminum (A5056)
Neoprene™	Chloroprene Rubber (CR)
BUNA	Nitrile Rubber (NBR)
Cast SS	Cast Stainless Steel (SCS14)
SS316	Stainless Steel Grade 316*
Cast iron	Cast Iron S45C
PPG	Glass Fiber Reinforced Polypropylene
PTFE	Polytetrafluoroethylene (Teflon®)
Hytrel™	Thermoplastic Polyester Elastomer (TPEE)
Santoprene®	Thermoplastic PolyOlefin (TPO)
Viton®	Fluoroelastomer (FKM)
EPDM	Ethylene propylene diene monomer (Nordel™)

* SS316 Mutliport plug material

DIMENSIONS TC-X253A,S,F



MODEL NUMBER NOMENCLATURE

Series
TC-X

TC-X | 253 | A | T | - | NPT | - | SP25

Spacers
Available to match competitor dimensions

Connection Type
NPT: Threaded FDA: Sanitary Clamp Fittings

Pump Connection Size
253 (1” x 1”)

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

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