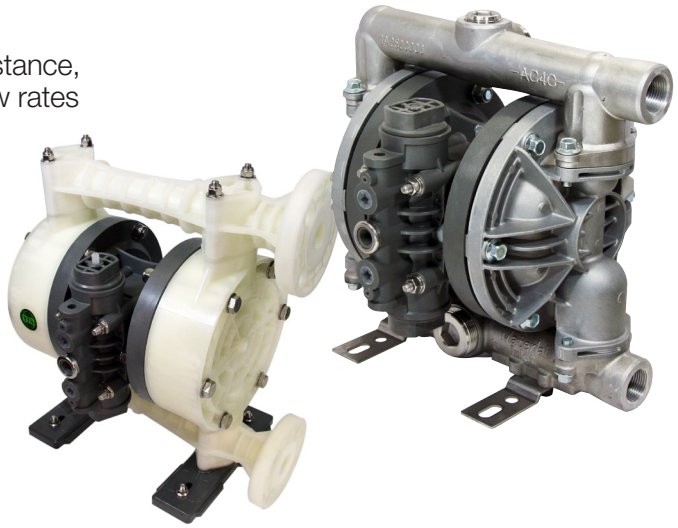
Air-Operated
Double Diaphragm Pumps

IWAKI AIR

1” TC-X 250 Series

The TC-X250 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 provides lower air consumption.



Maximum Flow Rate: 58.1GPM (220 L/Min)
Maximum Discharge Head: 230 ft (70 m)
Available in: Glass-Fiber Polypropylene, Conductive Polypropylene, PVDF (Kynar®), Stainless Steel 316, Aluminum and Cast Iron
Spool Valve Type: Looped C Spring Valve
Certification: CE, ATEX (select models)

SPECIFICATIONS

Material Code*	A"X"	S"X"	F"X"	AT/AW	ST/SW	FT/SW
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: Standard PPG Air motor 0~82°C. Aluminum air motor: A"X", S"X", CR, NBR 32-180°F (0-82°C) TPEE, FKM* 32-212°F (0-100°C) TPO, PTFE 32-212°F (0~100°C) * 248F (120C) option available, consult factory.
Ambient Temperature: 32-158°F (0-70°C)
Slurry Recommendation: 0.25" (6.5mm) or less
Viscosity Limit: Suction Lift ~3000 cps (3 Pa·s) Force in ~8000cps (8Pa·s) (Pumping slurry is dependent on pump size & materials. Please contact your distributor for more details)

SPECIFICATIONS

Material Code*	G"X" C"X"	V"X"	GT/GW	VT/GW
Max Flow Rate	43.6 GPM (165 LPM)			
Max Air Pressure	100 PSI (0.7 MPa)			
Max Air Consumption	56.5 scfm (1600 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	20 oz (600 mL)		17 oz (500 mL)	
Connection Suction x Discharge	NPT 1”		ANSI 150lb 1” JIS 10 K25A (DIN 25PN10)	
Weight	24.3 lbs (11 kg)	29.8 lbs (13.5 kg)	24.3 lbs (11 kg)	29.8 lbs (13.5 kg)

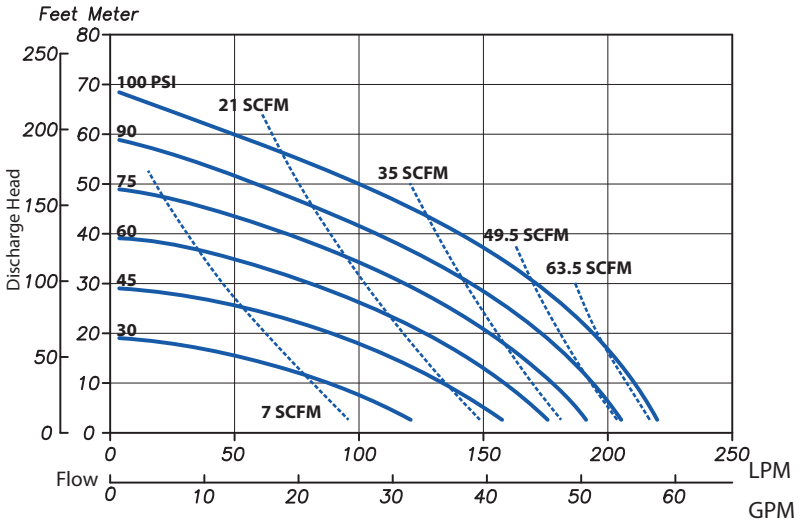
* See Chart and Model Number nomenclature on back page for materials
Note 1: A supply air pressure of 30 PSI (0.2 MPa) or more is required to operate the pump. If the supply pressure is less than 30 PSI (0.2 MPa), the pump may not operate properly.
Pump Liquid Temperature Range: Standard PPG Air motor 0~82°C. Aluminum air motor: V"X", FKM 32-248°F (0-120°C) TPEE* 32-212°F (0-100°C) TPO, PTFE 32-212°F (0~100°C) G"X", 32-180°F (0-82°C) * 248F (120C) option available, consult factory.
Ambient Temperature: 32-158°F (0-70°C)
Slurry Recommendation: 0.08" (2mm) or less
Viscosity Limit: Suction Lift ~3000 cps (3 Pa·s) Force in ~8000cps (8Pa·s) (Pumping slurry is dependent on pump size & materials. Please contact your distributor for more details)

PERFORMANCE CURVES

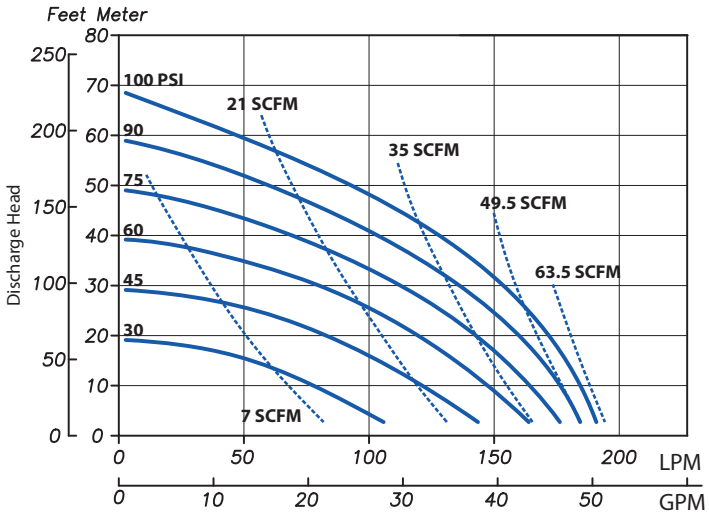
Flow
Air

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

TC-X250A"X",S"X",F"X" (except T & W)



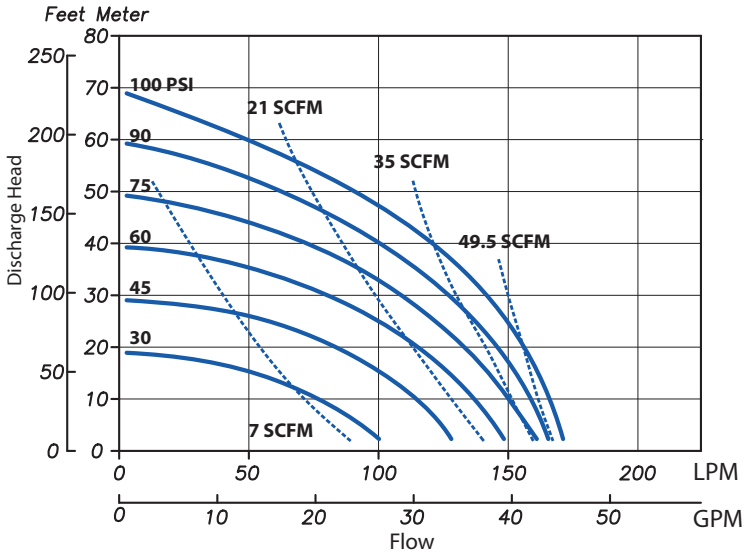
TC-X250 AT/AW,/ST/SW,/FT/FW



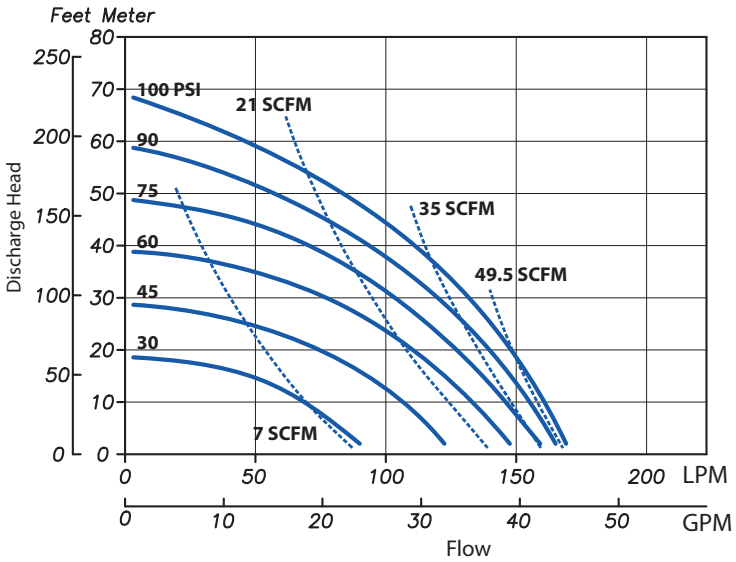
Flow
Air

Conditions:
4” (10 cm) flooded suction.
Ambient temperature: 75°F (24°C)
Liquid temperature: 72-75°F (22-24°C)

TC-X250G"X"/C"X"/ V"X" (except T & W)



TC-X250GT/CT/VT/GW/CW/VW



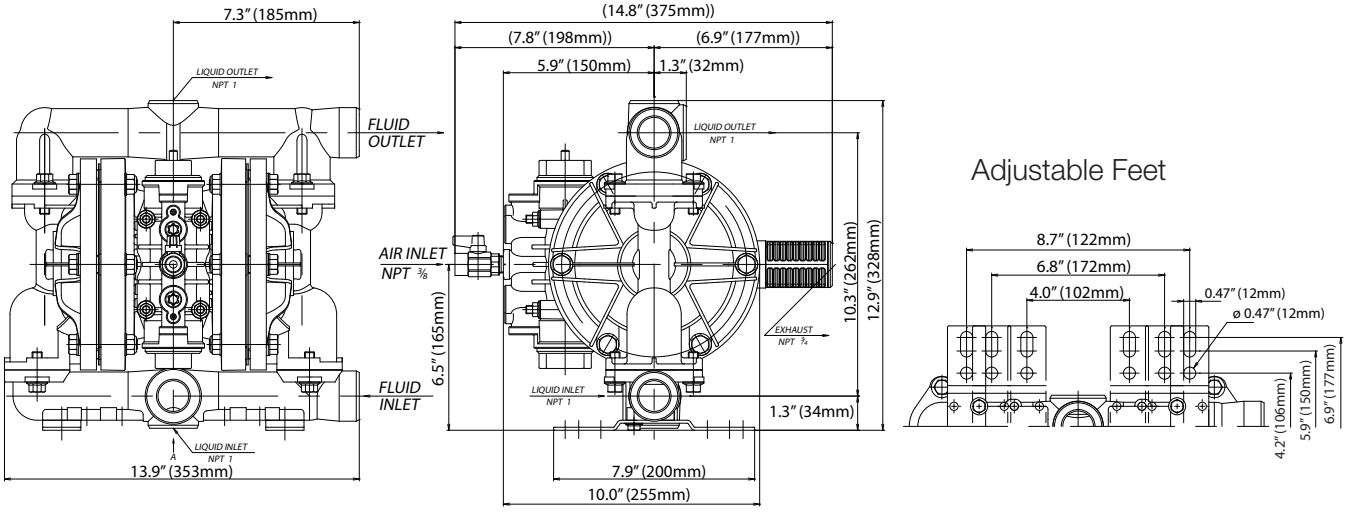
WET END MATERIALS

Code	Pump Wetted Parts	Diaphragm	Ball Valve/Seat 0-Ring	Valve Stopper/ Seat	Outer Diaphragm Plate	Center Body
AC	AL Alloy	Neoprene™	Neoprene™	SS316	AL	GFRPP or 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	Neoprene™	Neoprene™		SS316	
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™			
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™/BUNA	GFRPP	GFRPP (SCS13*)	GFRPP
GN		BUNA	BUNA			
GE		EPDM	EPDM			
GV		Viton®	Viton®			
GT		PTFE	PTFE			
GW		PTFE/EPDM backup (one-piece)	PTFE			
GH		Hytrel™	Hytrel™/BUNA			
GS		Santoprene®	Santoprene®/EPDM			
VE	PVDF	EPDM	EPDM	PVDF	PVDF (SCS13*)	
VV		Viton®	Viton®			
VT		PTFE	PTFE			
VW		PTFE/EPDM backup (one-piece)	PTFE			
VH		Hytrel™	BUNA			
VS		Santoprene®	EPDM			
CC	Conductive Poly	Neoprene™	Neoprene™/BUNA	Conductive Poly	Conductive Poly (SCS13*)	Conductive Poly
CN		BUNA	BUNA			
CE		EPDM	EPDM			
CV		Viton®	Viton®			
CT		PTFE	PTFE			
CW		PTFE/EPDM backup (one-piece)	PTFE			
CH		Hytrel™	Hytrel™/BUNA			
CS		Santoprene®	Santoprene®/EPDM			

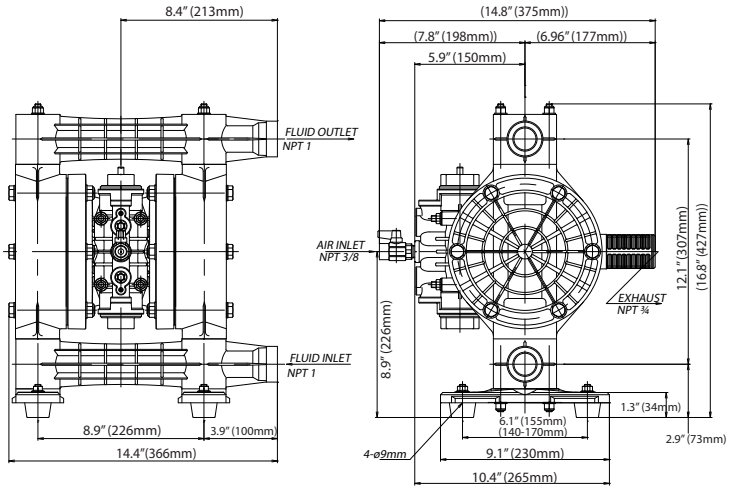
AL Alloy	Aluminum Alloy (ADC12)
AL	Aluminum (A5056)
Neoprene™	Chloroprene Rubber (CR)
BUNA	Nitrile Rubber (NBR)
Cast SS	Cast Stainless Steel (SCS14)
SS316	Stainless Steel Grade 316*
*SCS13	Cast Stainless Steel (insert material)
Cast Iron	Cast Iron S45C
GFRPP	Glass-Fiber Reinforced Polypropylene
PTFE	Polytetrafluoroethylene (Teflon®)
PVDF	Polyvinylidene Fluoride (Kynar®)
Hytrel™	Thermoplastic Polyester Elastomer (TPEE)
Santoprene®	Thermoplastic PolyOlefin (TPO)
Viton®	Fluoroelastomer (FKM)
EPDM	Ethylene propylene diene monomer (Nordel™)
Conductive Poly	Conductive Polypropylene (PC)

DIMENSIONS

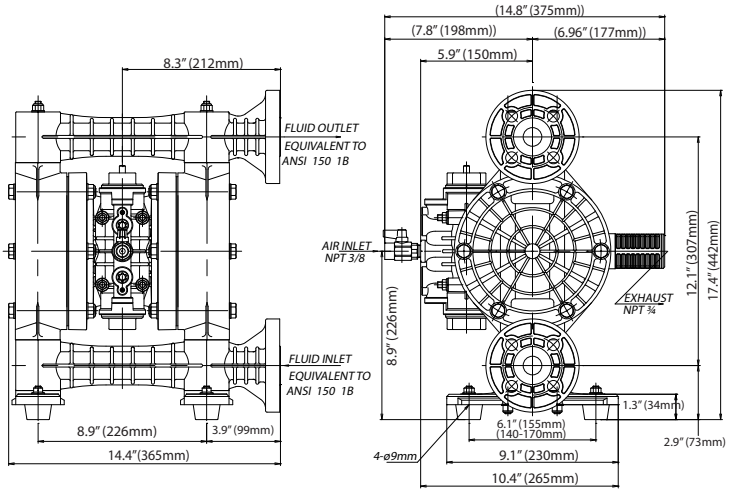
TC-X250A,S,F



TC-X250, G/C/V - NPT



TC-X250 G/C/V - FLANGE



MODEL NUMBER NOMENCLATURE

Series
TC-X

TC-X 250 G T - A - [ ] - X

Non-standard Options

Pump Connection Size
250 (1" x 1")

Pump Body Material (wetted)
G: PPG
V: PVDF
C: Conductive Poly

Connection Type
N: NPT
A: ANSI Flange (Plastic Only)

Center Body Material
Blank: GFRPP
A: Aluminum

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

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