Air Operated Double Diaphragm Pumps

IWAKI AIR EUROPE

TC-X051

¼" Diaphragm Pump Data Sheet

LoopedC

Max. Flow Rate: 15 l/min
Liquid Connections: ¼" Female Side-ports (optional Multiport)
Max. Slurry Size: 0 mm (with Flat Valves)
Max. Suction Lift: Dry: 4.5 m Wet (Primed): 8.0 m
Max. Discharge Pressure: 0.7 MPa
Check Valve Configuration: Flat Valves PTFE (optional Ball Valves on Metallic Pumps)
Pump Wetted Material Options: Al, SUS, PP, CFPP, CFPVDF , POM/Delrin
Diaphragm Options: PTFE
Air Motor Material: PPG
Description: ¼" AODD Pumps available in a large range of materials, Looped C-Spring Air Spool, One-piece PPG Air Motor Section, Female Threaded Side Port Connections & Multiports on Pure PP, Flat Check Valves, PTFE Diaphragms, Internal Silencer

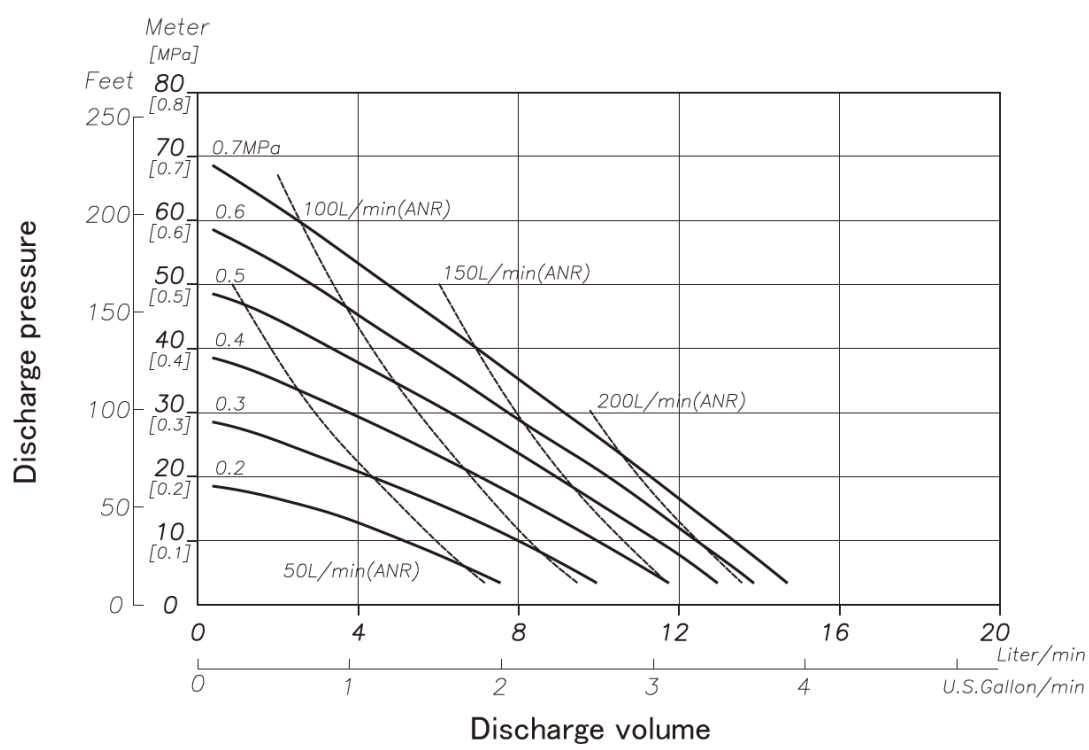
TC-X051PT
¼" PP Pump.

051 Pump Specifications		
Pump Model / Material	**AT ST**	**PT CT VT DT**
Max. Flow Rate	15 l/min [4.0 GPM]	
Max. Solids Size	0 mm / 0.5 mm Ball Valve Version	
Max. Discharge Pressure	0.7 MPa [100 PSI]	
Max. Suction Lift	Dry: 4.5 m Wet (Primed): 8.0 m	
Supply Air Pressure Range	0.2 - 0.7 MPa [30 - 100 PSI]	
Max. Air Consumption	250 l/min (ANR) [8.83 SCFM]	
Max. Discharge Volume Per Cycle	35 ml	
Ambient Temperature Range	0 - 70°C [32 - 158°F]	
Liquid Temperature Range	0 - 100°C [32 - 212°F] *	0 - 60°C [32 - 140°F]
Connections: Manifolds / Air	¼" Rc Female Threaded Side-Ports_Multi-Ports on Pure PP Model / ¼" Rc Ball valve	

*Operating in the condition a fluid temperature is at 70°C or above might cause an early degradation of performance and required to change the material of air motor seal parts. Please contact your nearest distributor for details.

Note. *Factors affecting a pumps stated liquid flow rate, suction lift & solids handling capabilities include, but are not limited to; pump size, diaphragm, ball valve & ball seat, type & materials of construction, air inlet pressure & air flow capability, liquid viscosity, specific gravity, slurry content, ambient & liquid temperature, liquid inlet & liquid outlet width, piping type, piping length & overall piping configuration. A minimum supply air pressure of 30 PSI (0.2 MPa) is required to operate the pump.*

Pump Performance Curves



PPG Air Motor

For more information about TC-X Pumps please contact: sales@iwaki.de
WWW.IWAKI.DE

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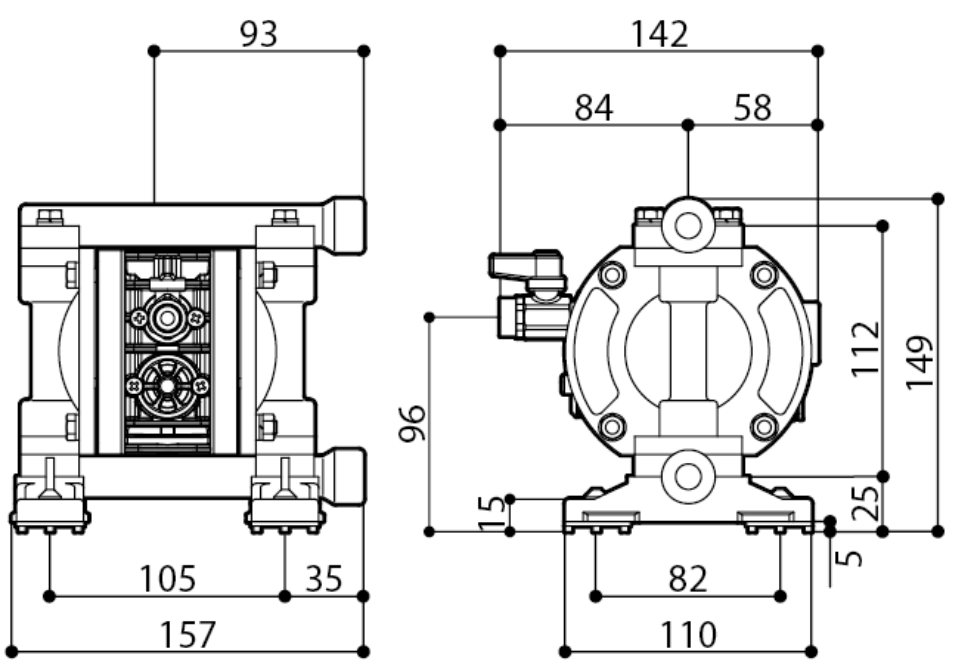
Wetted Materials Of Construction

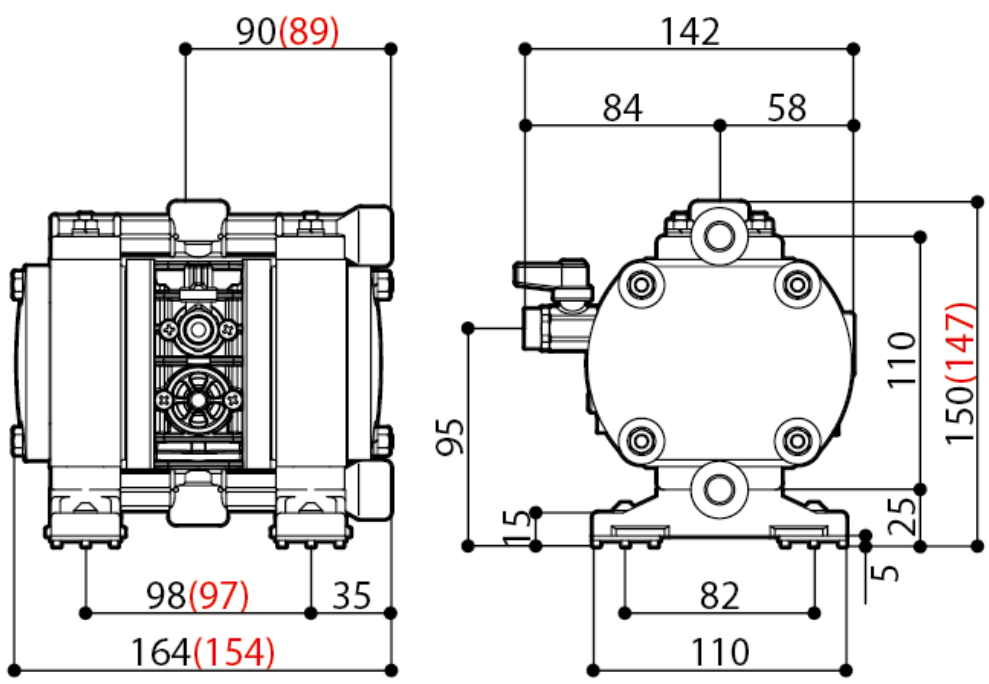
MODEL	051AT (ATN)	051ST (STN)	051PT (PTN)	051CT (CTN)	051VT (VTN)	051DT (DTN)
Pump Wetted Parts	ADC12	SCS14	PP	CFPP	CFPVDF	POM
Diaphragm	PTFE					
Valve Stopper	SUS316	SUS316	PP	CFPP	CFPVDF	POM
Flat Valve	PTFE					
Valve Seat	SUS316	SUS316	PP	CFPP	CFPVDF	POM
Center Disk	SUS316	SUS316	PP	CFPP	CFPVDF	POM
Weight	1.5 kg (3.3 lbs)	2.5 kg (5.5 lbs)	1.2 kg (2.7 lbs)	1.5 kg (3.3 lbs)	1.5 kg (3.3 lbs)	1.5 kg (3.3 lbs)

Dimensional Drawings

051 AT ST



051 PT VT



Pump Nomenclature

Series — TC-X | 051 | P | T | N | - | X — Special Options

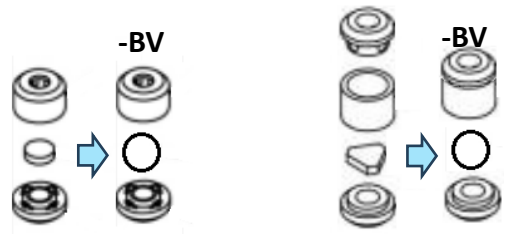
BV: Ball Valves

Pump Connection Size
051 (¼")

Pump Body Material (Wetted)
A: Al
S: SUS
P: PP
C: CFPP
V: CFPVDF
D: Delrin

Diaphragm Material
T: PTFE

Connection Type
☐: Rc
N: NPT



Standard Flat valves
Optional Ball valves for
PP, CFPVDF, ALU and SUS

TC-X051AT
¼" Aluminium Pump

TC-X051ST
¼" Stainless Steel Pump

TC-X051CT
¼" CFPP Pump

TC-X051VT
¼" CFPVDF Pump

AODD Pump Capabilities

Self Priming	Variable Discharge Pressures	Inherently Safe Design
Run Dry	Transfer Liquid Slurries	Portable & Easy to Use
Run up to Dead Head	Transfer Large Sized Solids	Transfer Viscous Fluids
Variable Flow Rates	Handle Abrasives	Frequent Start Stop Operation
Shear Sensitivity	Transfer Chemicals	Powered by Compressed Air

CE LoopedC

Ex II2G ExhIIBT5Gb「0°C<Ta<70°C」
II2D ExhIIIBT100°CDb「0°C<Ta<70°C」

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