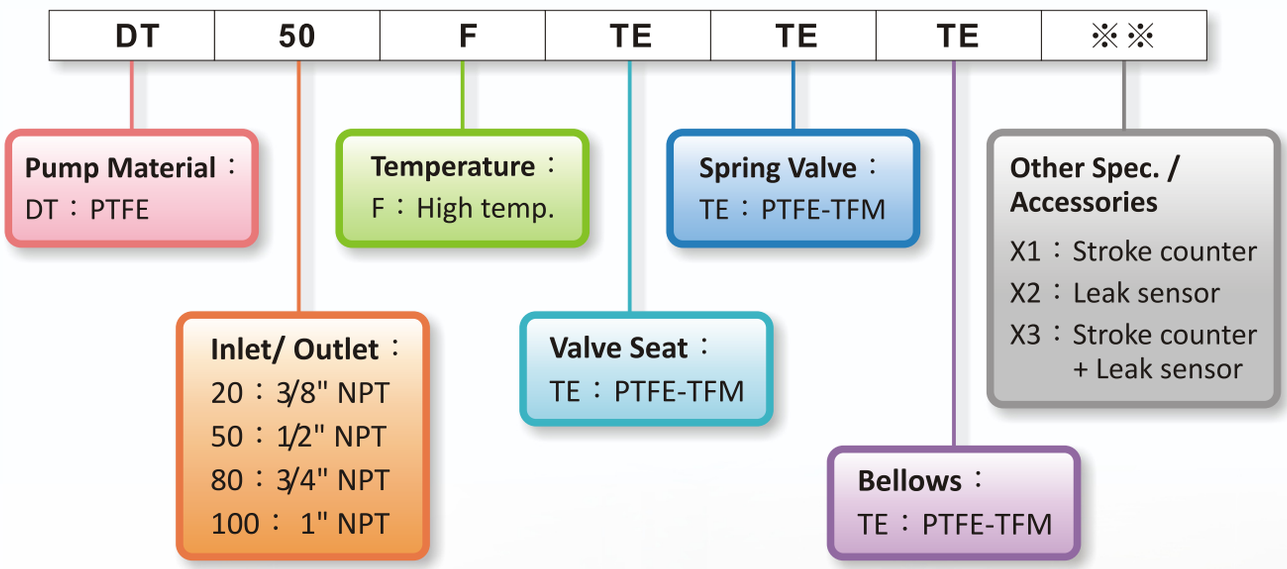
Bellows Pumps



Bellows Pumps

In order to fulfill our valuable clients' requirement in PCB, LED, OPTO, PV, solar and other industries, DINO Technology Co., Ltd. manufactured high-class Bellows pump with PTFE material for construction. No metal design is key feature of Bellows pump. All assembly, testing and packing are conducted in class 100 cleanroom. Our goal is to manufacture a high purity, no pollution and electronic-grade pump. Bellows pump has been constantly improved and tested and now we have full confidence in the quality, performance and life span which are also the advantages that can compete with other brands. We have taken out two patents and CE certificateon on 「 separable air valve and dry-run 」 designs. We are committed to providing you "high quality, competitive price, quick delivery, and good service" products.

Model & Material Indicate



Advantage

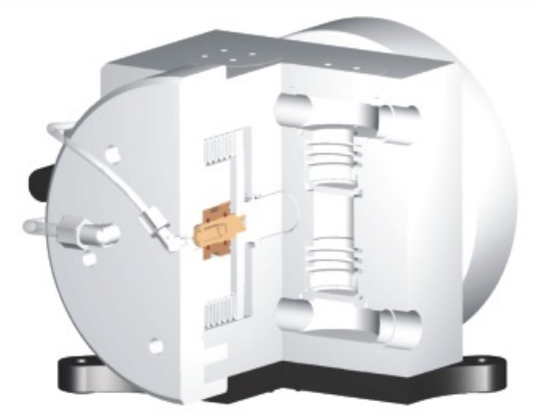
- DT and DT-F can be used in various application.
- No metal design, oil-free, lubricant-free and maintenance-free.
- Patent air valve: high anti-abrasion precise ceramic shuttle shaft. No thermal expansion and constraction.
- Wetted parts are composed of pure TEFLON and are high temperature- resistance, chemical-resistance and pollution-free.
- Max. temperature can reach up to 200℃.
- Assembly, testing and packing are conducted in Class 100 cleanroom.
- Allows 30 minutes dry-run.
- 1 bar low startup pressure allows to reduce air consumption and prolong pump's life span.
- Oring-free, special thread and leak-free designs.
- Firm pump body with characteristic of high pressure-resistance, anti-abrasion and high ductility. Bellows pump can operate over 200,000,000 times.

Feature

Patent Air Valve

High density PE manufactured, no metal spare parts combination; better air tightness, low air consumption, no air clogged in low air supply; separable air valve can be adjusted according to installation space.





CERAMIC Shuttle Shaft

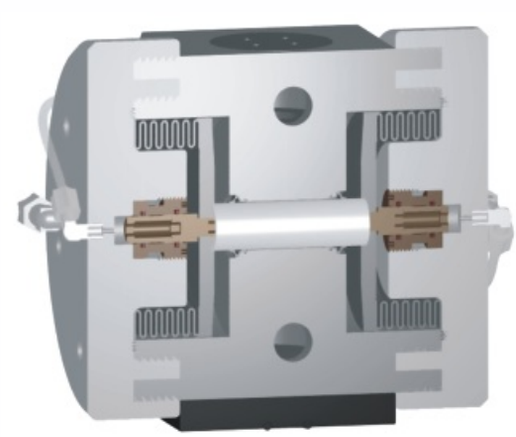
Using high anti-abrasion ceramic, No thermal expansion and contraction ; shuttle shaft and sleeve fit closely for perfect sealing and precise stable operating system.



PTFE-TFM Spring Valve



Better flexibility, ductility, and non-deformation; allows transfering liquid without horizontal installation; inner concave design, flat contact for better sealing and self-priming; protecting bellows from damage caused by back pressure.



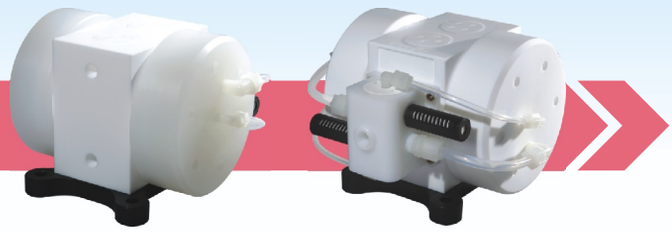
PTFE-TFM Bellows

Manufactured with high purity and high density PTFE. Better anti-abrasion and ductility. 8mm thick shielding on the top of the bellows to reduce damage caused by sharp particle; long life-span, over 200,000,000 times operation.



DINO Bellows Pumps

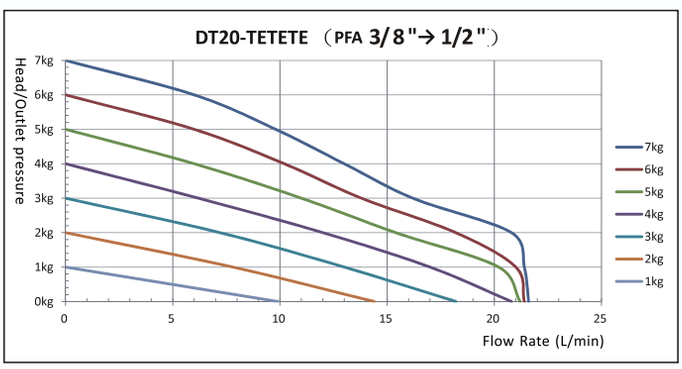
3/8" DT20, DT20F



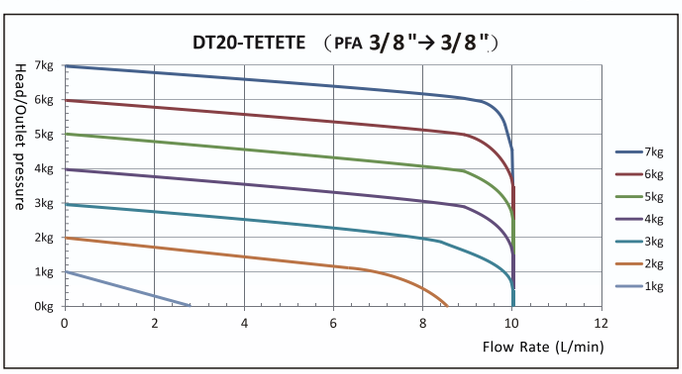
Technical Data

Inlet / Outlet (NPT)		3 / 8"
Air connection (NPT)		3 / 8"
Max. capacity (LPM)	(1/2")	21.6
	(3/8")	10
Operating pressure (Bar)		1 - 7
Max. temperature	PTFE	100℃
	High-temp.PTFE	200℃
Max. particle		0.5mm
Suction lift, dry		2m
Suction lift, wet		6m
Weight	PTFE	8kgs
	High-temp.PTFE	10kgs

Performance Curve



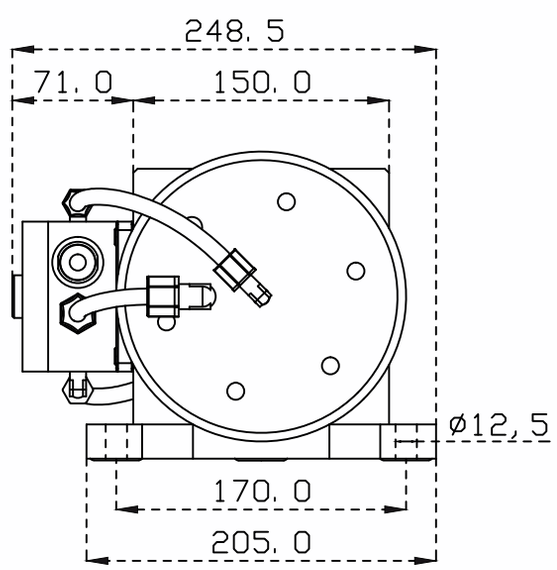
*Test condition: Pure water at room temperature, Fully open fluid inlet/outlet 1/2" PFA tube with inside diameter 9.53mm, air pipe(ID:4mm)

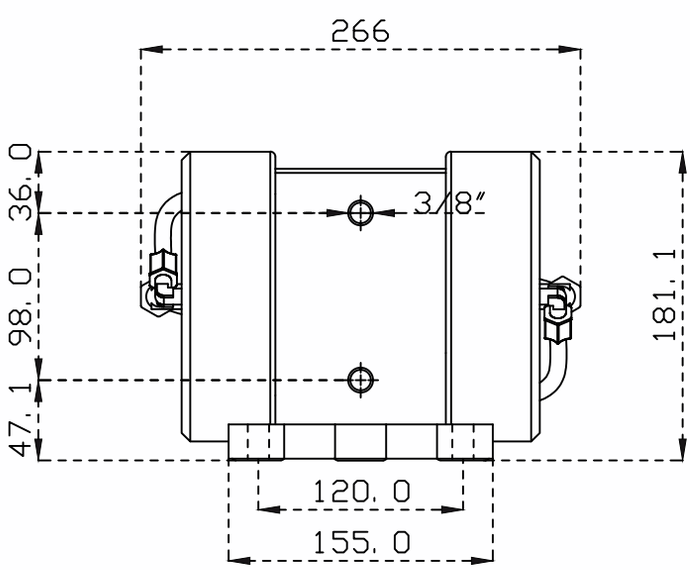


*Test condition: Fully open fluid inlet/outlet 3/8" PFA tube with inside diameter 6.35mm, air pipe(ID:4mm)

*Performance curves may vary based on application.

Outline Dimension

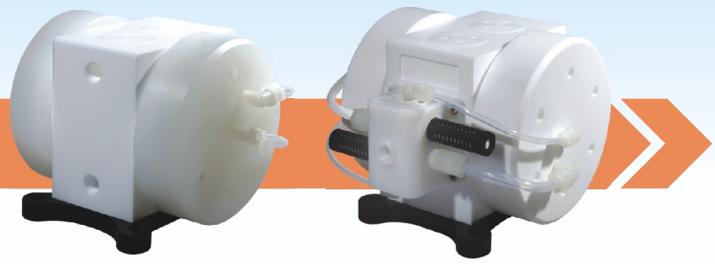




Unit:mm

DINO Bellows Pumps

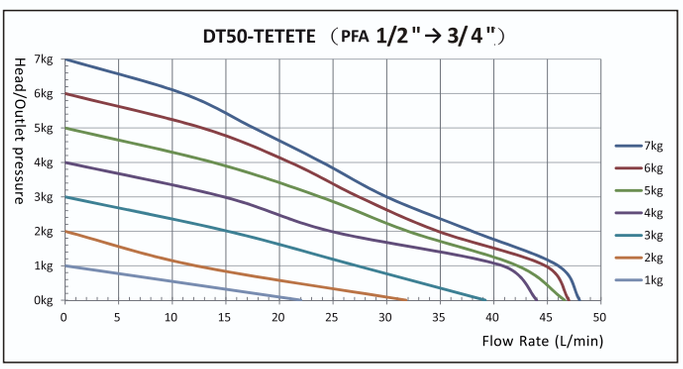
1/2" DT50, DT50F



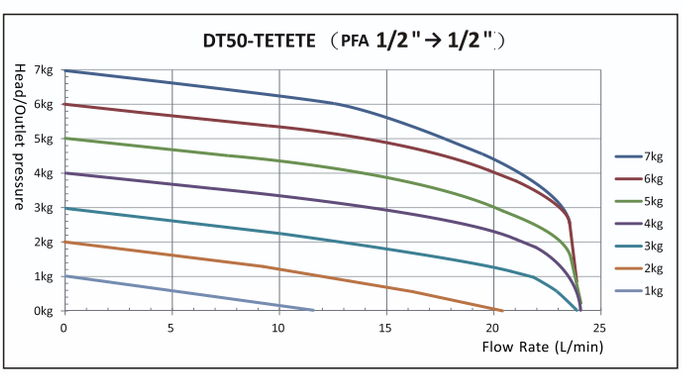
Technical Data

Inlet / Outlet (NPT)		1 / 2"
Air connection (NPT)		3 / 8"
Max. capacity (LPM)	(3/4")	48
	(1/2")	24
Operating pressure (Bar)		1 - 7
Max. temperature	PTFE	100℃
	High-temp.PTFE	200℃
Max. particle		0.5mm
Suction lift, dry		2m
Suction lift, wet		6m
Weight	PTFE	11kgs
	High-temp.PTFE	14kgs

Performance Curve



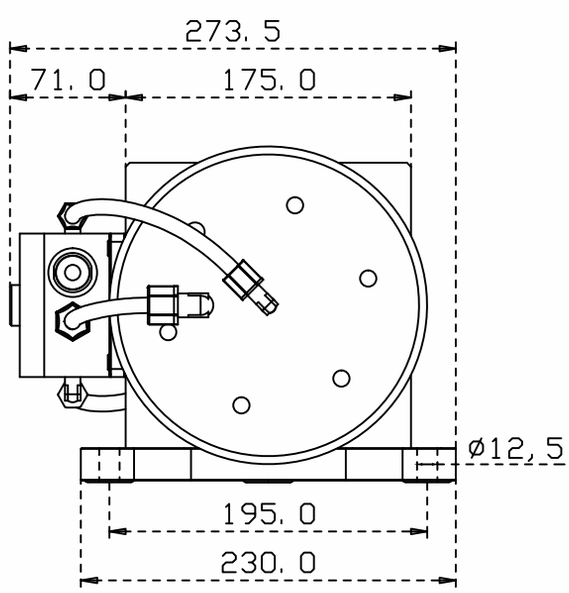
*Test condition: Pure water at room temperature, Fully open fluid inlet/outlet 3/4" PFA tube with inside diameter 15.88mm, air pipe(ID:4mm)

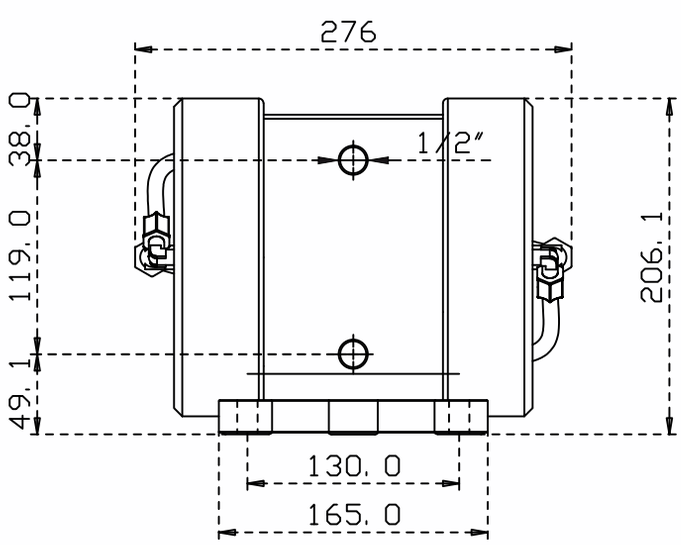


*Test condition: Fully open fluid inlet/outlet 1/2" PFA tube with inside diameter 9.53mm, air pipe(ID:4mm)

*Performance curves may vary based on application.

Outline Dimension

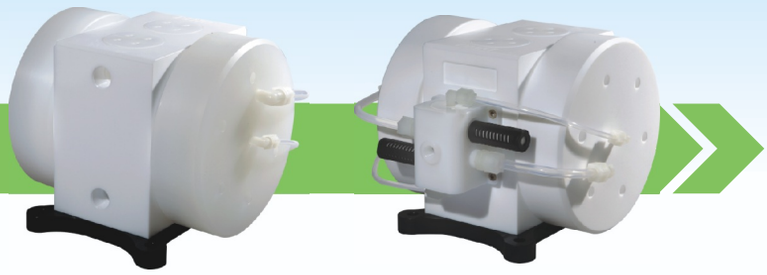




Unit:mm

DINO Bellows Pumps

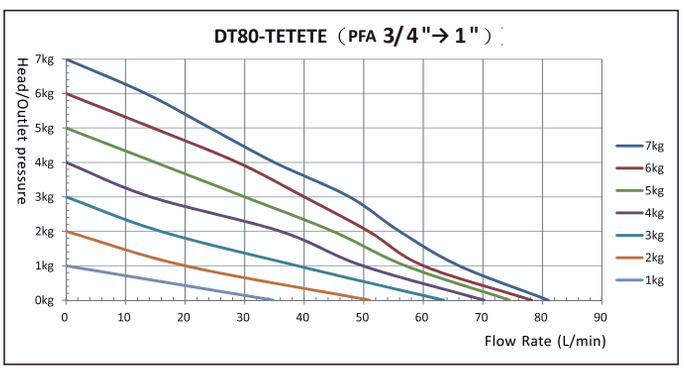
3/4" DT80, DT80F



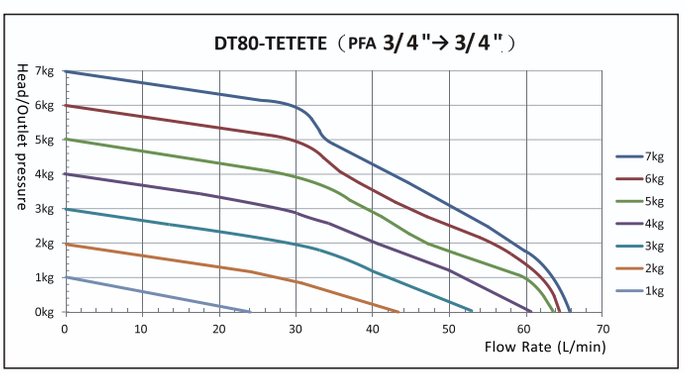
Technical Data

Inlet / Outlet (NPT)		3 / 4"
Air connection (NPT)		3 / 8"
Max. capacity (LPM)	(1")	81
	(3/4")	66
Operating pressure (Bar)		1 - 7
Max. temperature PTFE		100℃
	High-temp.PTFE	200℃
Max. particle		0.5mm
Suction lift, dry		2m
Suction lift, wet		6m
Weight	PTFE	16kgs
	High-temp.PTFE	20.5kgs

Performance Curve



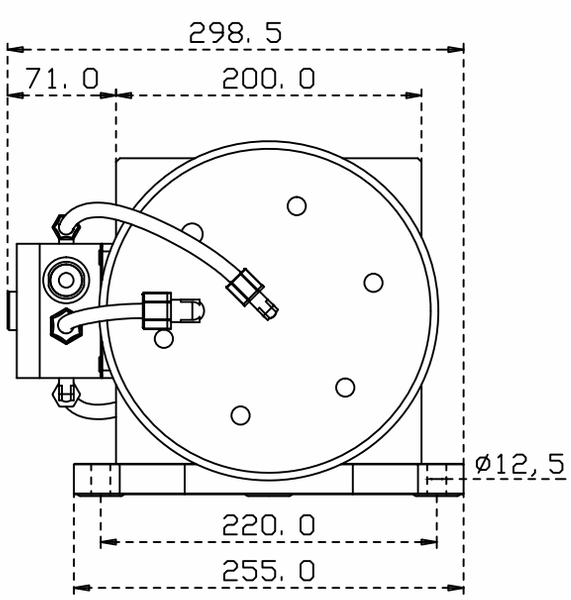
*Test condition: Pure water at room temperature, Fully open fluid inlet/outlet 1" PFA tube with inside diameter 22.23mm, air pipe(ID:4mm)

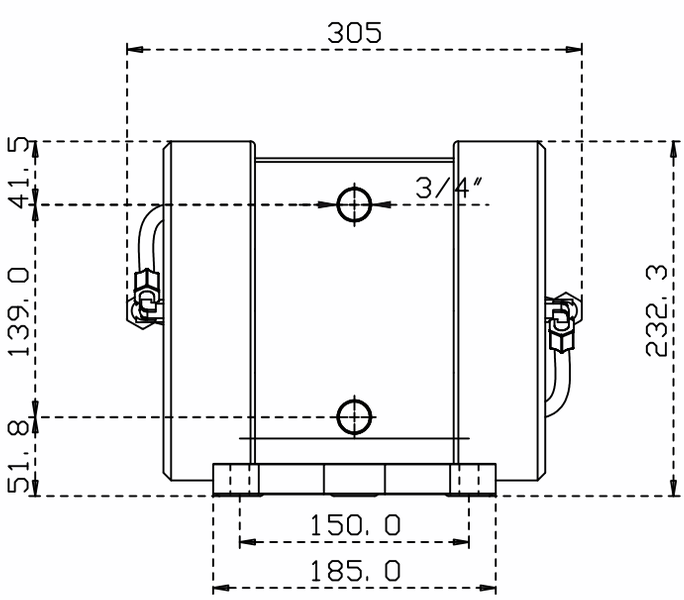


*Test condition: Fully open fluid inlet/outlet 3/4" PFA tube with inside diameter 15.88mm, air pipe(ID:4mm)

*Performance curves may vary based on application.

Outline Dimension

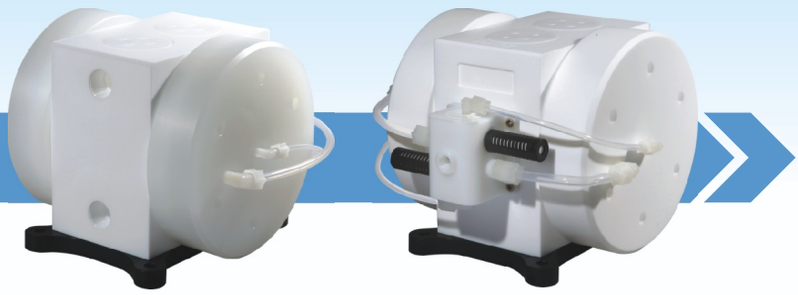




Unit:mm

Bellows Pumps

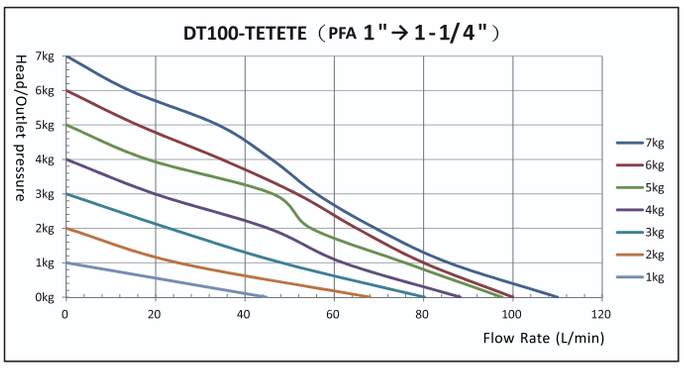
1" DT100, DT100F



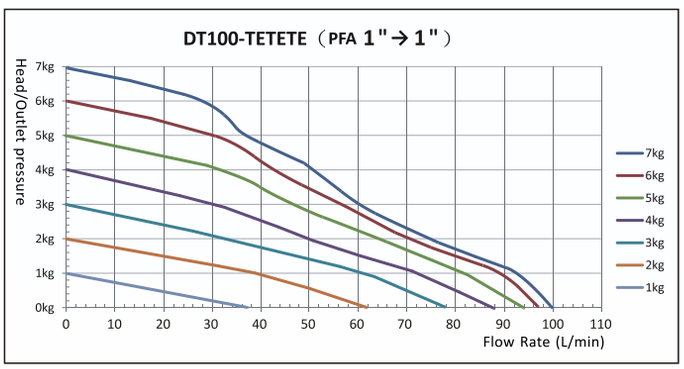
Technical Data

Inlet / Outlet (NPT)		1"
Air connection (NPT)		3 / 8"
Max. capacity (LPM)	(1-1/4")	110
	(1")	100
Operating pressure (Bar)		1 - 7
Max. temperature	PTFE	100℃
	High-temp.PTFE	200℃
Max. particle		0.5mm
Suction lift, dry		2m
Suction lift, wet		6m
Weight	PTFE	21kgs
	High-temp.PTFE	27kgs

Performance Curve



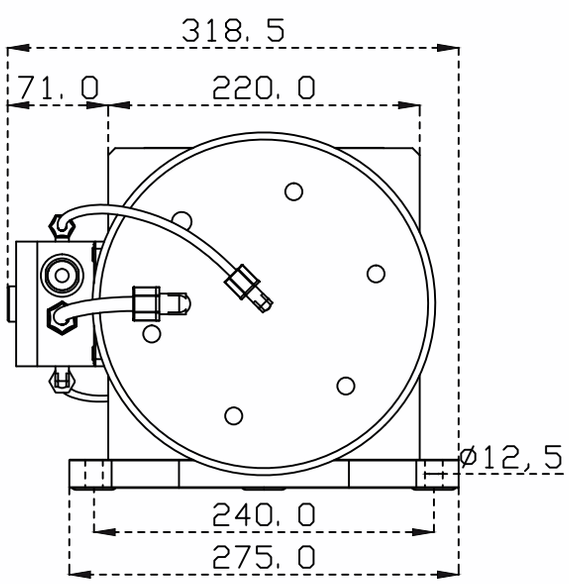
*Test condition: Pure water at room temperature, Fully open fluid inlet/outlet 1-1/4" PFA tube with inside diameter 27.55mm, air pipe(ID:4mm)

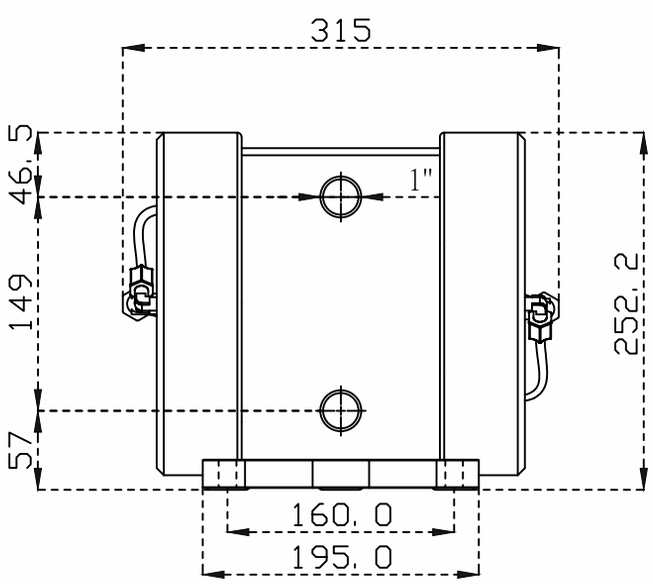


*Test condition: Fully open fluid inlet/outlet 1" PFA tube with inside diameter 22.23mm, air pipe(ID:4mm)

*Performance curves may vary based on application.

Outline Dimension





Unit:mm

Optional Accessories

NPT

American National Pipe Taper Threads

Pipe size	Threads per Inch TPI-pitch	Nominal outside Pipe Diameter OD		Thread angle	Thread Pitch length	
		(in)	(mm)		(in)	(mm)
1/4"	NPT 18	0.54	13.7	60	0.0556	1.412
3/8"	NPT 18	0.675	17.1	60	0.0556	1.412
1/2"	NPT 14	0.84	21.3	60	0.0714	1.814
3/4"	NPT 14	1.05	26.7	60	0.0714	1.814
1"	NPT 11 1/2	1.315	33.4	60	0.087	2.21
1 1/4"	NPT 11 1/2	1.66	42.2	60	0.087	2.21



Pulsation Dampener

No metal, directly install on the pump, auto-adjustable for effictive decrease pulsation to smooth flow speed.
Each size have suitable dampener.



Stroke Counter

Install on the air pipeline of pump, a sensor detect differential pressure in pipeline, and send out the signal.



Leak Sensor

Precision absorbent ceramic absorb leaked liquid, let sensor detect liquid and send out signal.

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