

Air Operated Double Diaphragm Pumps

TC-X

TC-X152

1/2" Diaphragm Pump Data Sheet

Max Flow Rate: 60 L/min.

Liquid Connections: 1/2" Female Multiports.

Max Slurry Size: 1.0 mm (Ball Valve Models).

Max Suction Lift: Dry Flat Valve: 2.0m. Ball Valve: 1.5m. Wet (Primed): 8.0m.

Max Discharge Pressure: 0.7 Mpa.

Check Valve Configuration: Flat Valves & Ball Valve Models.

Pump Wetted Material Options: AI, SUS, PP, CFPVDF.

Diaphragm Options: PTFE, CR, NBR, TPEE, TPO.

Air Motor Material: PPG. (Optional CFPP).

Description: 1/2" AODD Pumps available in a full range of materials. Looped C® Spring Air Spool. Polypropylene Air Motor. Multi Port Threaded Connections. Internal Silencer. Multi Footprint.

Pump Features: New High Performance 1/2" AODD Pumps fitted with the Looped C® Air Spool, Ekonol® Seal Rings & independent Pilot Valves for increased performance, reliability & extended life cycle. High Flow Rates. Both Ball & Flat Check Valve Models with a large range of standard & special Diaphragm options. Compact size, drop-in dimensions & multi footprint. Fully bolted body, heavy-duty construction & wide sturdy PPG plastic base. 100% oil or grease lubrication free, offering clean, emissions free, environmentally friendly operation. Easily maintainable with fully modular replaceable wear parts, outside accessible Air Spool & manual Spool Reset Switch. Fully torqued, leak and operation tested prior to shipment. Patented design with patents pending. Designed and manufactured in Japan.



TC-X152A□

1/2" Aluminium Pump.

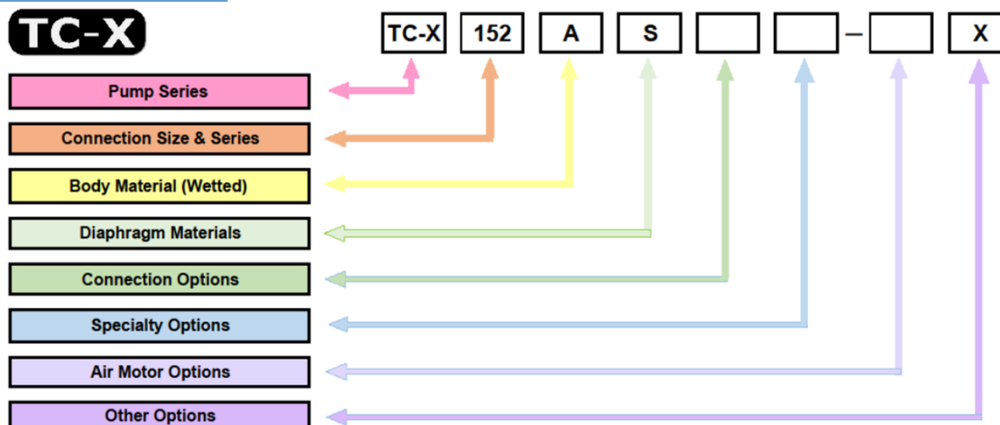


152 Pump Specifications

Pump Model / Material	A□ S□	P□ VT
Max Flow Rate	60 L/min [15.8 GPM]	56 L/min [14.8 GPM] (Flat Valve Version)
Max Solids Size	1.0mm or Less	0mm (Flat Valve Version)
Max Discharge Pressure	0.7 Mpa [100 PSI]	
Max Suction Lift	Flat Valve Dry: 2.0 meters Ball Valve Dry: 1.5 meters Wet (Primed): 8.0 meters	
Supply Air Pressure Range	0.2 - 0.7 MPa [30 - 100 PSI]	
Max Air Consumption	900 L/min (ANR) [31.8 SCFM]	
Max Discharge Volume Per Cycle	85 mL	
Ambient Temperature Range	0 - 70 °C [32 - 158 °F]	
Liquid Temperature Range	0 - 70 °C [32 - 158 °F]	0 - 60 °C [32 - 140 °F]
Connections: Suction & Discharge	1/2" Female Threaded Multi-Ports	

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. If the supply pressure is less than 30PSI (0.2 MPa), the pump may not operate properly. Flat type check valve pumps are not recommended for use with slurry laden liquids. Oil & Grease Lubrication is not required under normal operating conditions. All 152 Series Diaphragm Pumps are shipped complete with a PPG Base, SUS Air Inlet Shutoff Valve, Internally fitted Exhaust, Liquid Outlet Plugs and Pipe Tape as Standard Accessories.

Nomenclature

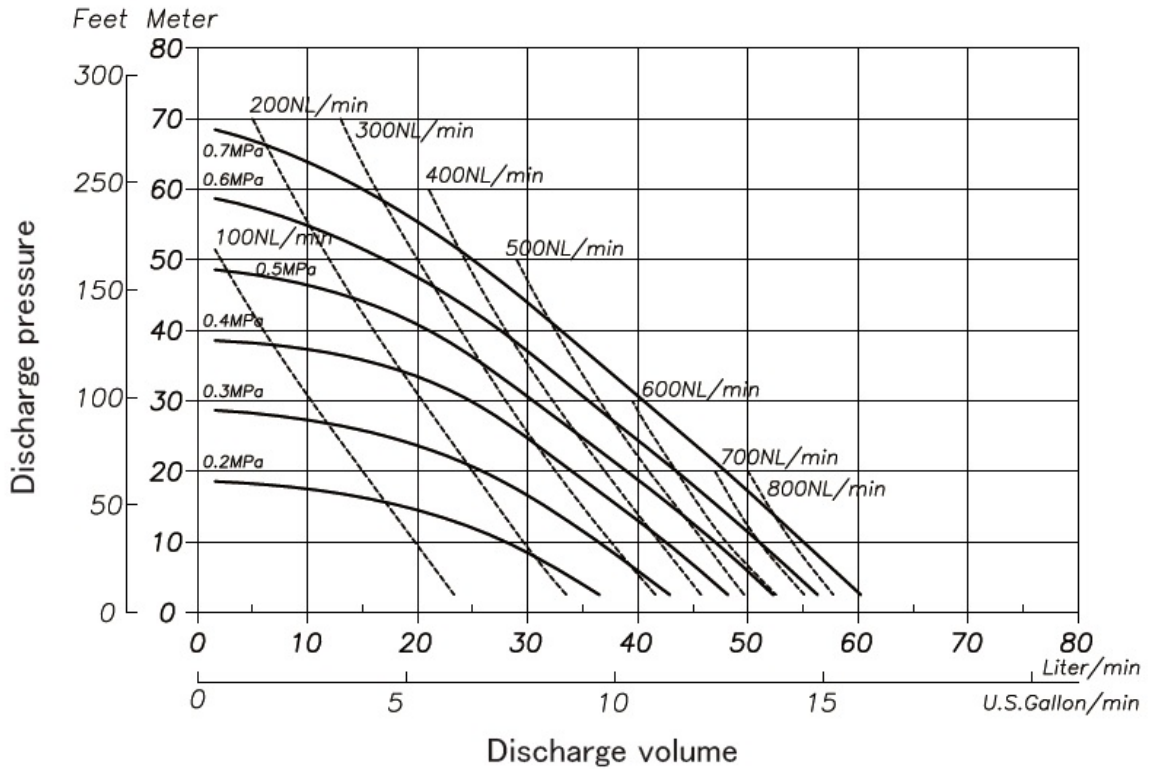


Newly Improved Looped C® Air Spool, Ekonol® Seal Rings & Heavy Duty Spring Retainer.

Pump Performance Curves

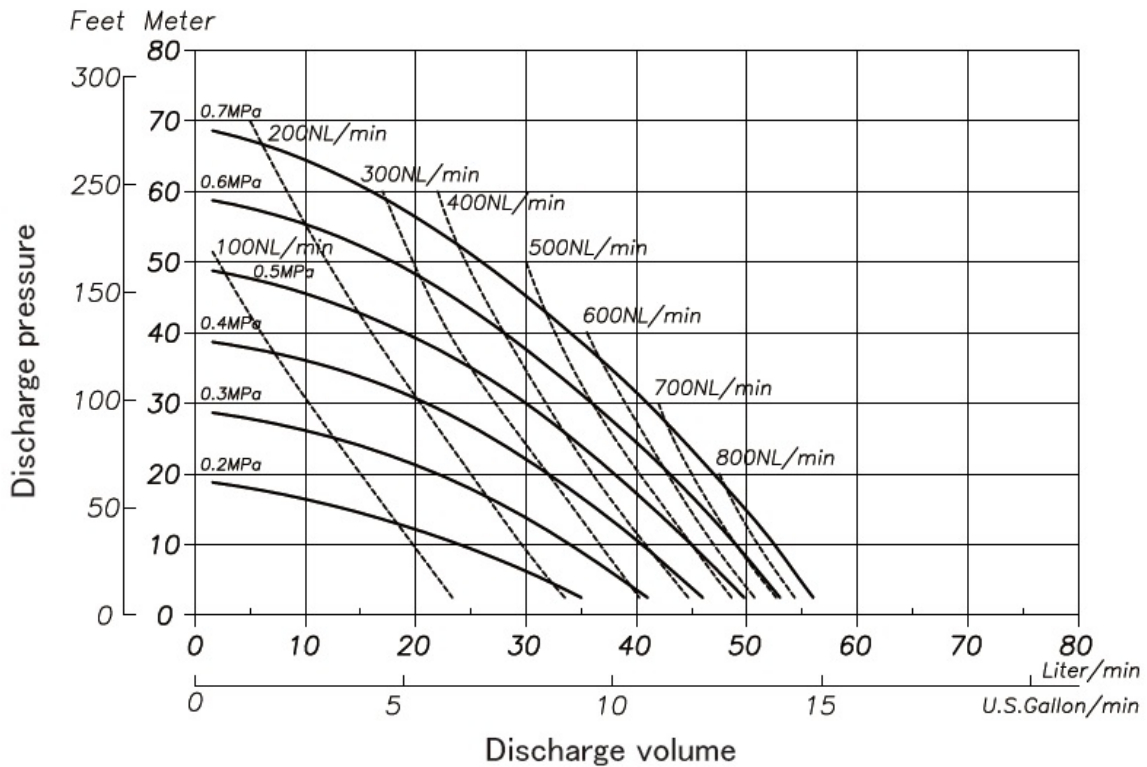
Metallic Pump Curves

152A □ · S □



Plastic Pump Curves (Flat Check Valves)

152P □ · VT



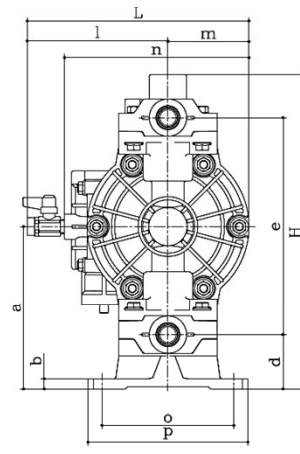
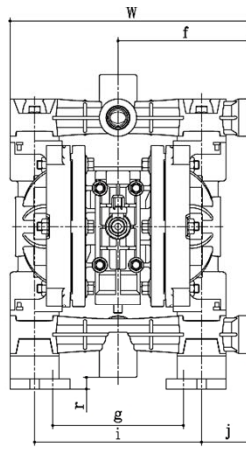
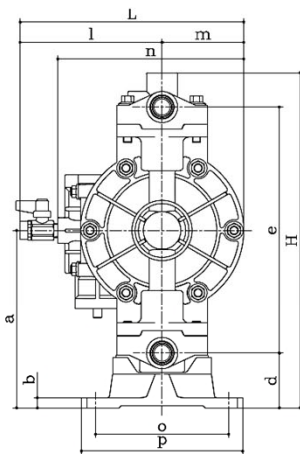
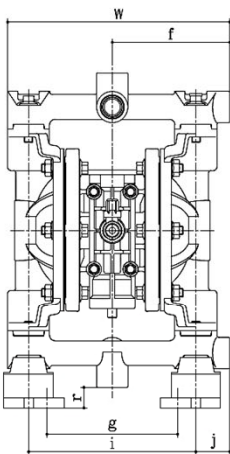
Wetted Materials Of Construction

MODEL	152AC [152ACN]	152AN [152ANN]	152AT [152ATN]	152AH [152AHN]	152AS [152ASN]	152SC [152SCN]	152SN [152SNN]	152ST [152STN]	152SH [152SHN]	152SS [152SSN]
Pump Wetted Parts	ADC12					SCS14				
Diaphragm	CR	NBR	PTFE	TPEE	TPO	CR	NBR	PTFE	TPEE	TPO
Valve Stopper	PA					SCS14				
Flat Valve										
Ball Valve	CR	NBR	PTFE	NBR	EPDM	CR	NBR	PTFE	NBR	EPDM
Valve Seat	A5056					SUS316				
Center Disk	A5056					SUS316				
Weight	4.1kg [9.1 lbs]					6.7kg [14.8 lbs]				

MODEL	152PC [152PCN]	152PN [152PNN]	152PT [152PTN]	152PH [152PHN]	152PS [152PSN]	152VT [152VTN]	152VS [152VSN]	152DT [152DTN]	152CC [152CCN]	152CN [152CNN]	152CT [152CTN]	152CH [152CHN]	152CS [152CSN]
Pump Wetted Parts	PP					PVDF		POM	PP CONDUCTIVE				
Diaphragm	CR	NBR	PTFE	TPEE	TPO	PTFE	TPO	PTFE	CR	NBR	PTFE	TPEE	TPO
Valve Stopper	PP					PVDF		POM	PP CONDUCTIVE				
Flat Valve	PTFE					PTFE		PTFE	PTFE				
Ball Valve													
Valve Seat	PP					PVDF		POM	PP CONDUCTIVE				
Center Disk	PP					PVDF		POM	PP CONDUCTIVE				
Weight	3.1kg [6.9 lbs]					4.2kg [9.3 lbs]		3.8kg [8.4 lbs]	3.1kg [6.9 lbs]				

Dimensional Drawings

MODEL	H	W	L	a	b	d	e	f	g	i	j	l	m	n	o	p	r	AIR INLET	AIR EXH	LIQUID IN/OUT
152A □ [152A □ N]	312	207	208	166	10	51	230	109	122	156	32	132	76	174	124	150	19	Rc1/4 [NPT1/4]	Rc3/8 [NPT3/8]	Rc1/2 [NPT1/2]
152S □ [152S □ N]	[12.28]	[8.15]	[8.19]	[6.54]	[0.39]	[2.01]	[9.06]	[4.29]	[4.80]	[6.14]	[1.26]	[5.20]	[2.99]	[6.85]	[4.88]	[5.91]	[0.75]			
152P □ [152P □ N]	295	228	208	153	10	51	204	127	123	157	49	132	76	174	124	150	11			
152V □ [152V □ N]																				
152DT [152DTN]																				
152C □ [152C □ N]	[11.61]	[8.98]	[8.19]	[6.02]	[0.39]	[2.01]	[8.03]	[5.00]	[4.84]	[6.18]	[1.93]	[5.20]	[2.99]	[6.85]	[4.88]	[5.91]	[0.43]			



TC-X

AODD Pump Capabilities.

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|----------------------|-------------------------------|--------------------------------|
| 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. |

For more information about TC-X Pumps please contact: sales@yts-pump.com

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ATEX Compliant
II 2GD c T5



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