

Air Operated Double Diaphragm Pumps **TC-X**

— TC-X200 Metallic

¾" Metallic Diaphragm Pump Data Sheet

- Max Flow Rate:** 200 L/min. (Rubber)
- Max Discharge Pressure:** 0.7 MPa.
- Max Slurry Size:** 6.5 mm.
- Max Suction Lift:** PTFE Dry: 1.5m Rubber Dry: 4.5m. Wet (Primed): 8.0m.
- Liquid Connection Size:** ¾".
- Liquid Connection Configuration:** Female Threaded Centre Ports.
- Pump Wetted Material Options:** Aluminium, Stainless Steel.
- Air Motor Material:** PPG (Optional CFPP & Aluminium).
- Diaphragm Options:** PTFE, CR, NBR, TPEE, TPO, EPDM, FKM.
- Check Valve Configuration:** Ball Type Check Valves.
- Air Motor Model:** Looped C® Spring Air Spool.
- Exhaust Configuration:** External Plastic Exhaust Silencer (×1).
- Base & Footprint:** Heavy Duty Steel Legs.



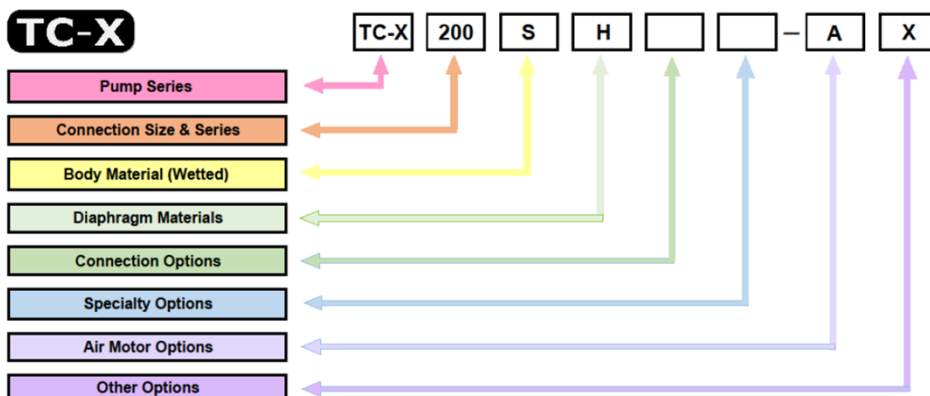
TC-X200S
¾" SUS AODD Pump
200 L/min Max

Description & Features: High performance ¾" Metallic AODD Pumps fitted with the Looped C® Air Spool, Ekonol® Seal Rings & Fully Independent Pilot Valves for increased performance, reliability & extended life cycle. Very high flow rates & very large solids size capability. Improved air consumption utilizing the new Air Eco-Ring®. Large range of standard & specialty diaphragm options. Compact size, Drop-in dimensions & Multi footprint. Fully bolted body, heavy-duty construction & wide sturdy steel base. 100% oil & 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.

200 Metallic Pump Specifications		
Pump Model	A □ S □	AT ST
Max Flow Rate	200 L/min [52.8 GPM]	190 L/min [50.2 GPM]
Max Solids Size	6.5 mm	
Max Discharge Pressure	0.7 MPa [100 psi]	
Supply Air Pressure Range	0.2 – 0.7 MPa [30 - 100 psi]	
Max Suction Lift	PTFE Dry: 1.5 meters. Rubber Dry: 4.5 meters. Wet (Primed): 8.0 meters.	
Max Air Consumption	1600 L/min (ANR) [56.5 SCFM]	
Max Discharge Vol Per Cycle	800 mL	650 mL
Ambient Temp Range	0 – 70°C [32 – 158°F]	
Liquid Temp Range	0–70°C [32–158°F] (MT Models; NBR/CR 0–70°C TPEE/EPDM 0–80°C FKM/TPO/PTFE 0–100°C)	
Inlet & Outlet Connections	¾" Female Threaded Centre 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. Oil & Grease Lubrication is not required under normal operating conditions. All 200 Series Diaphragm Pumps are shipped complete with Heavy Duty Steel Legs, Air Inlet Shutoff Valve & External Plastic Exhaust Silencer as Standard Accessories.

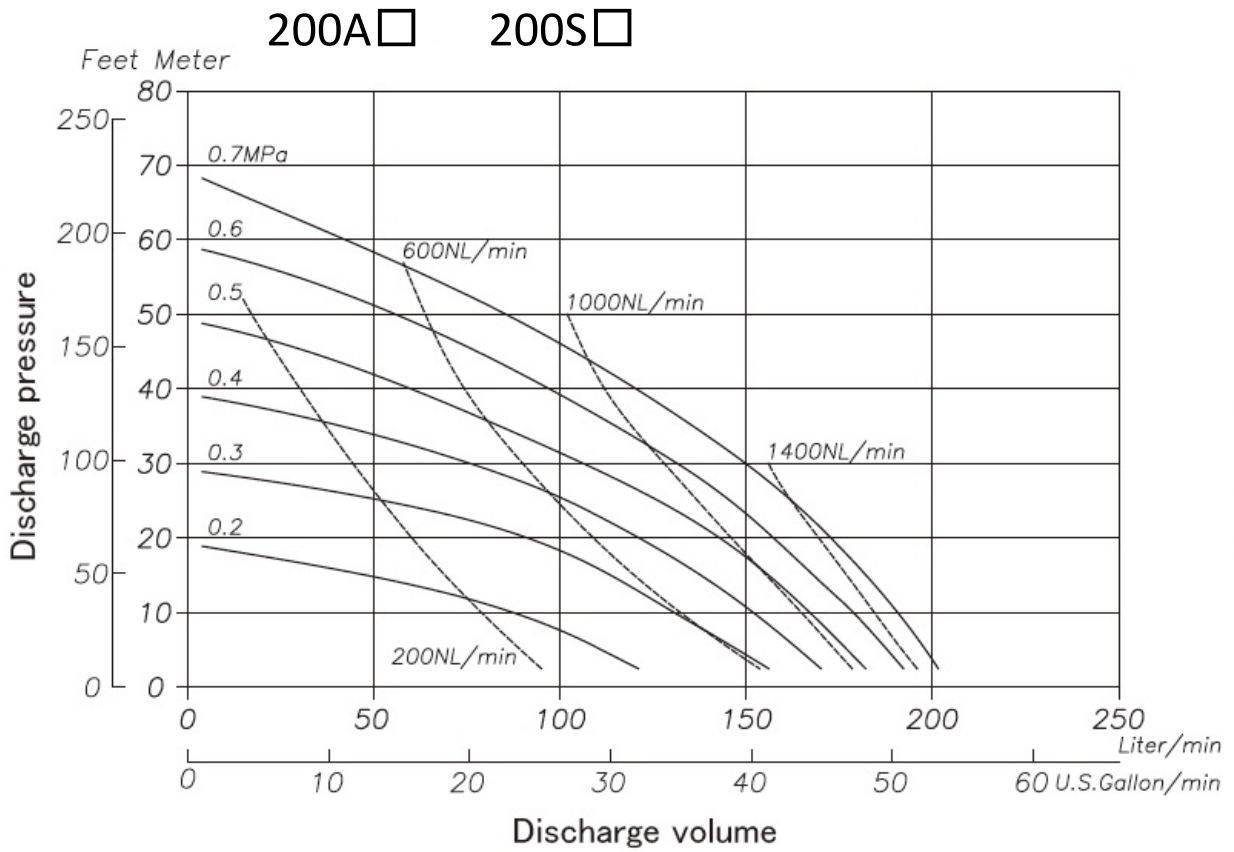
Nomenclature



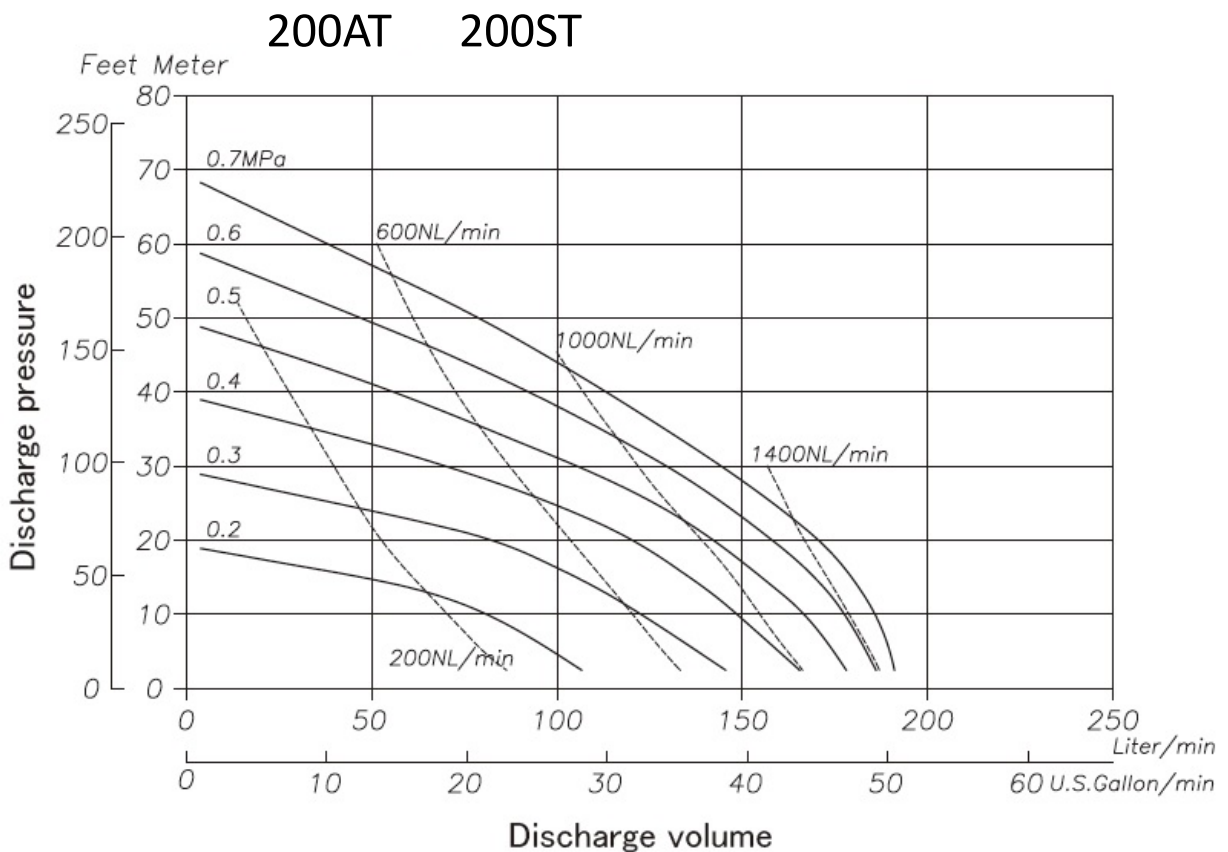
TC-X200A
¾" Aluminium Pump

Pump Performance Curves

Rubber Diaphragm Curves



PTFE Diaphragm Curves

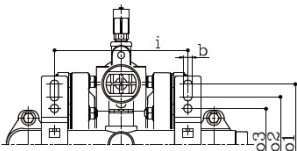
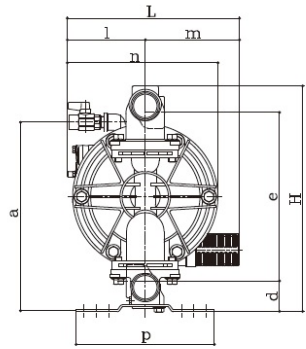
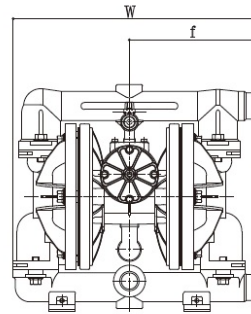
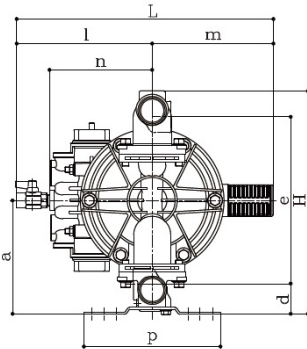
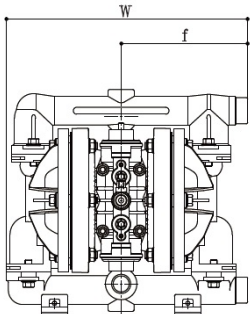


Wetted Materials Of Construction

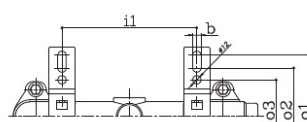
MODEL	200AC [200ACN]	200AN [200ANN]	200AE [200AEN]	200AV [200AVN]	200AT [200ATN]	200AH [200AHN]	200AS [200ASN]	200SC [200SCN]	200SN [200SNN]	200SE [200SEN]	200SV [200SVN]	200ST [200STN]	200SH [200SHN]	200SS [200SSN]
Pump Wetted Parts	ADC12 · AC4C							SCS14						
Diaphragm	CR	NBR	EPDM	FKM	PTFE	TPEE	TPO	CR	NBR	EPDM	FKM	PTFE	TPEE	TPO
Valve Stopper	SCS14							SCS14						
Ball Valve	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM
Valve Seat	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM	CR	NBR	EPDM	FKM	PTFE	NBR	EPDM
Center Disk	SUS316							SUS316						
Weight	10.5 kg [23.1 lbs] -A : 11.5 kg [25.4 lbs]							20.0 kg [44.1 lbs] -A : 21.0 kg [46.3 lbs]						

Dimensional Drawings

MODEL	H	W	L	a	b	d	e	f	i	l	m	n	o1	o2	o3	p	AIR INLET	AIR EXHAUST	LIQUID IN/OUT
200A □ [200A □ N]	326 [12.83]	353 [13.90]	375 [14.76]	165 [6.50]	12 [0.47]	44 [1.73]	244 [9.61]	185 [7.28]	195 [7.68]	198 [7.80]	177 [6.97]	150 [5.91]	177 [6.97]	140 [5.51]	106 [4.17]	200 [7.87]	Rc3/8 [NPT3/8]	Rc3/4 [NPT3/4]	Rc3/4 [NPT3/4]
200S □ [200S □ N]	324 [12.76]						242 [9.53]												
200A □ -A [200A □ N-A]	326 [12.83]	353 [13.90]	249 [9.80]	273 [10.75]	12 [0.47]	44 [1.73]	244 [9.61]	185 [7.28]	195 [7.68]	113 [4.45]	136 [5.35]	218 [8.58]	177 [6.97]	140 [5.51]	106 [4.17]	200 [7.87]	Rc3/8 [NPT3/8]	Rc3/4 [NPT3/4]	Rc3/4 [NPT3/4]
200S □ -A [200S □ N-A]	324 [12.76]						242 [9.53]												



Plastic Air Motor Models



Metallic Air Motor Models

High Flow Ball Guide®

The revolutionary Patented High Flow Ball Guide® will achieve very high flow rates (up to 200 l/min) and allows for the passage of very large solids (up to 6.5mm). Fitted as standard to all 200 3/4" Metallic pumps, the High Flow Ball Guide® is fully modular & replaceable helping to reduce the overall long term costs of service & repair.



Looped C® Air Spool

Next Generation Spring Assisted Non-Centering Spool. Newly Improved with SUS Non-Centering Looped C® Springs & specially redesigned Spool Shaft. Original High Performance Ekonol® Plastic Seal Rings. Outside Accessible with fully modular Spool Sleeve. Modern Long Life Materials of Construction. 100% Oil & Grease Lubrication Free Design.



TC-X

Pumps Made In Japan

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. |

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

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