Air-Operated
Double Diaphragm Pumps

IWAKI AIR

# 1” TC-X 252 Series (Non-Metallic)

The TC-X252 1" pumps are available in PVDF for high chemical resistance.
Featuring the new Looped C™ Air Motor Technology (patent pending).
New Air EcoRing feature (patent pending) provides lower air consumption.
Both Flange and Threaded connection models are available.



Maximum Flow Rate: 43.6 GPM (165 L/Min)
Maximum Discharge Head: 230 ft (70 m)
Available in: Filled Polypropylene and PVDF (Kynar®)
Spool valve type: C-Spring Valve
Certification: CE, ATEX (select models)

Looped C® Patent Pending

Air EcoRing Patent Pending

## SPECIFICATIONS

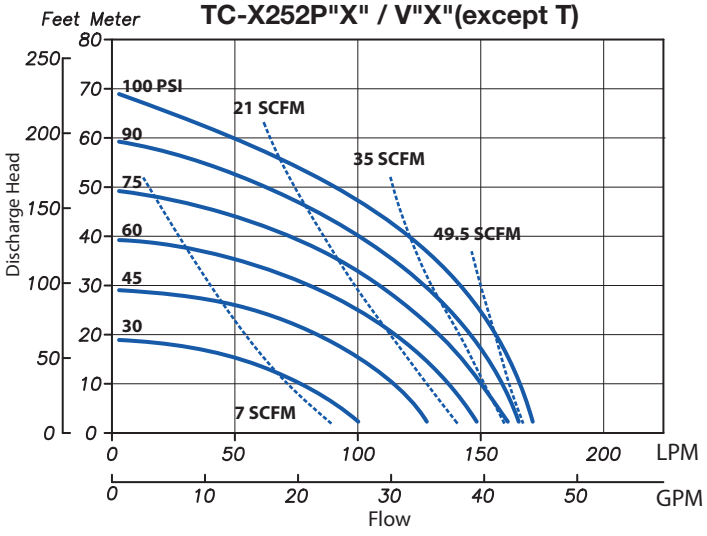
| Material Code* | P"X"(-FLA) | V"X"(-FLA) | PT(-FLA) | VT(-FLA) |
|---|---|---|---|---|
| **Max Flow Rate** | 43.6 GPM (165 LPM) | | | |
| **Max Air Pressure** | 100 PSI (0.7 MPa) | | | |
| **Max Air Consumption** | 56.5 scfm (1600 L/min) | | 63.6 scfm (1800 L/min) | |
| **Supply Air Pressure Range** [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”<br>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) |

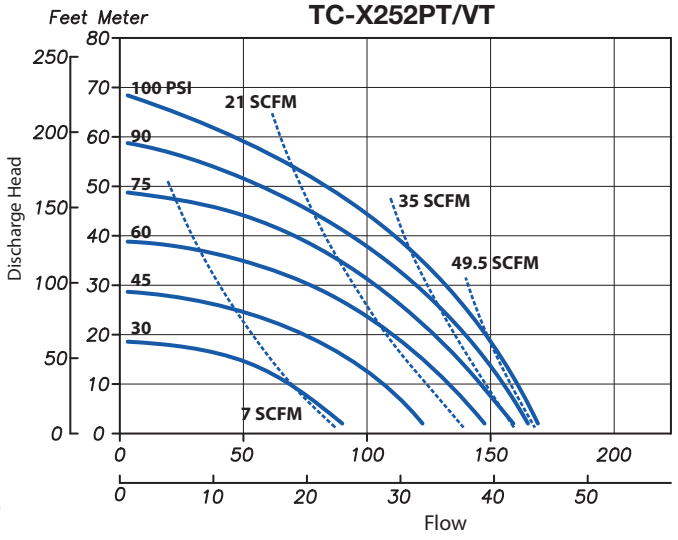
* See Chart and Model Number nomenclature on back page for materials
Note 1: A supply air pressure of 30 PSI (0.2 MPa) or more is required to operate the pump. If the supply pressure is less than 30 PSI (0.2 MPa), the pump may not operate properly.
Pump Liquid Temperature Range: 32-140°F(0~60°C)
Ambient 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: 75°F (24°C)
Liquid temperature: 72-75°F (22-24°C)



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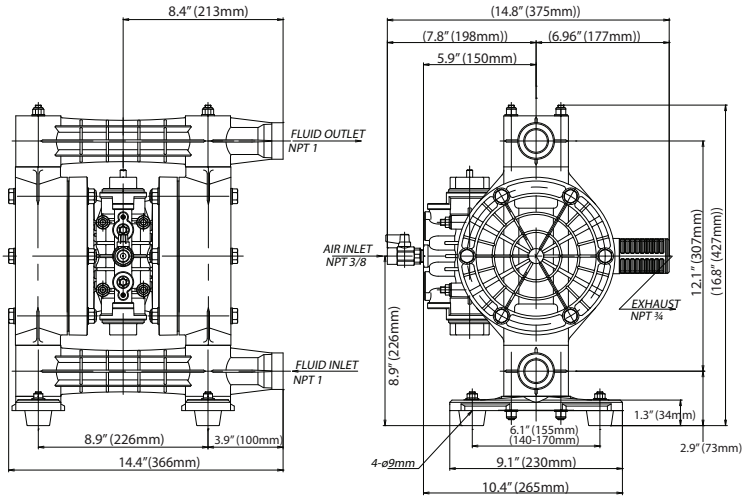
## WET END MATERIALS

| Code | Pump wetted parts | Diaphragm | Ball Valve/ O-Ring | Valve Seat | Outer Diaphragm Plate | Center Body |
|---|---|---|---|---|---|---|
| PC | PPG | Neoprene™ | Neoprene™/BUNA | PPG | PPG (SCS13*) | PPG |
| PN | | BUNA | BUNA | | | |
| PE | | EPDM | EPDM | | | |
| PV | | Viton® | Viton® | | | |
| PT | | PTFE | PTFE | | | |
| PH | | Hytrel™ | Hytrel™/BUNA | | | |
| PS | | Santoprene® | Santoprene®/EPDM | | | |
| VE | PVDF | EPDM | EPDM | PVDF | PVDF (SCS13*) | |
| VV | | Viton® | Viton® | | | |
| VT | | PTFE | PTFE | | | |
| VH | | Hytrel™ | BUNA | | | |
| VS | | Santoprene® | EPDM | | | |

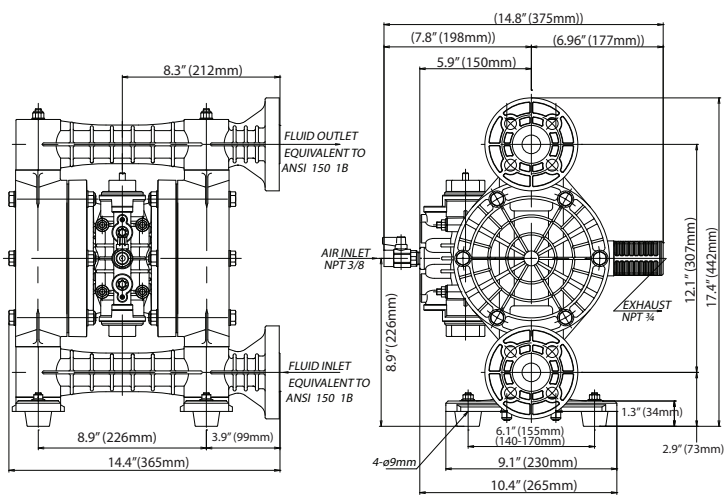
| | |
|---|---|
| Neoprene™ | Chloroprene Rubber (CR) |
| BUNA | Nitrile Rubber (NBR) |
| *SCS13 | Cast Stainless Steel (Insert material) |
| PPG | Glass Fiber Reinforced Polypropylene |
| PTFE | Polytetrafluoroethylene (Teflon®) |
| PVDF | Polyvinylidene Fluoride (Kynar®) |
| Hytrel™ | Thermoplastic Polyester Elastomer (TPEE) |
| Santoprene® | Thermoplastic PolyOlefin (TPO) |
| Viton® | Fluoroelastomer (FKM) |

## DIMENSIONS

### TC-X252P, V




### TC-X252P-FLA, V-FLA




## MODEL NUMBER NOMENCLATURE

**Series**
TC-X

TC-X | 252 | P | T | - | PC | - | NPT

**Connection Type**
NPT: Threaded FLA: Flange

**Optional Wetted Material**
PC: Conductive Poly

**Pump Connection Size**
252 (1” x 1”)

**Pump Body Material (wetted)**
P: PPG
V: PVDF

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

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