

The Type ED100A automated tank cleaning machine provides 360° impact indexed coverage for the cleaning of the inside of tanks and process vessels.

### Industries

The Type ED100A is a highly versatile machine and is applicable in most all types of tanks for process, storage, and transportation.

### Operational

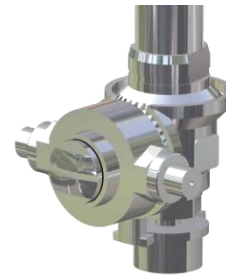
The Type ED100A machine creates a pattern matrix similar to a ball of twine (see cleaning pattern simulation in the lower left hand corner of this page). A complete pattern is established when 36 axial revolutions of the body have been completed. During the process of this pattern build out, 4 cycles are established with each cycle increasing the density of the pattern matrix.

### User Benefits

- High Jet-Stream Impact
- Reduced Cleaning Times
- Reduced Effluent Generation
- Reduced Energy Costs
- Controllable Axial Rotation



DRIVE UNIT



NOZZLE HEAD



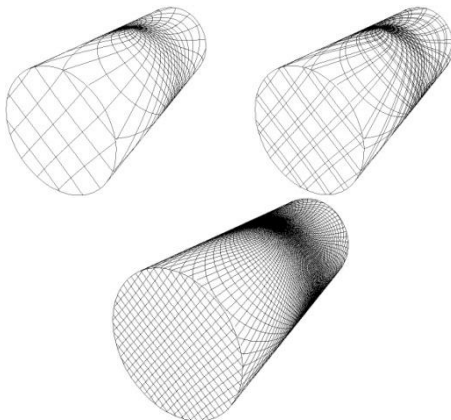
COMPLETE ASSEMBLY

### Type ED100A - Part Number Designations

Model	Qty. Nozzles	Nozzle Type	Nozzle Size	Flange Type	Tube Length
ED100A	2	1	C10	1	36
Part Number = ED100A-2-1-C10-1-36					

Nozzle Designations	
Nozzle Type	Nozzle Size
1	C10; C15; C20; C25; C30; C35; C40; C50; C60; C70; C80
Mounting Flange Arrangements	
Flange Type	Description
1	Standard; 3 prong; 316LSS
2	3.00" 150# ANSI RF; 316LSS
2a	4.00" 150# ANSI RF; 316LSS
3	3.00" Tri-Clamp; 316LSS
3a	4.00" Tri-Clamp; 316LSS
3b	6.00" Tri-Clamp; 316LSS
Tube Length Designations	
Tube Type	Description
36	36.00 inches (914.40mm) - Nominal
48	48.00 inches (1219.20mm) - Nominal
72	72.00 inches (1829.00mm) - Nominal

### Cleaning Pattern Simulation



Typical - Horizontal Cylindrical Tank

### Specifications - Summary

Materials of Construction (As Standard):

- Wetted Parts
  - 316LSS
  - PTFE
- Other Parts
  - See manual for parts detail

Weights & Packaged Dimensions

- Tube Type 36
  - Flange Type 1&3 : 14 lbs. (6.4 kg)
  - Flange Type 2 : 24.50 lbs. (11.1 kg)
  - Flange Type 2a : 29.50 lbs. (13.4 kg)
  - Flange Type 3a : 14.25 lbs. (6.5 kg)
  - Flange Type 3b : 17.00 lbs. (7.7 kg)
- Tube Type 48
  - Flange Type 1&3 : 15.5 lbs. (7.0 kg)
  - Flange Type 2 : 26.00 lbs. (11.8 kg)
  - Flange Type 2a : 31.00 lbs. (14.1 kg)
  - Flange Type 3a : 15.50 lbs. (7.0 kg)
  - Flange Type 3b : 18.50 lbs. (8.4 kg)
- Tube Type 72
  - Flange Type 1&3 : 18.50 lbs. (8.4 kg)
  - Flange Type 2 : 29.00 lbs. (13.2 kg)
  - Flange Type 2a : 34.00 lbs. (15.4 kg)
  - Flange Type 3a : 18.75 lbs. (8.5 kg)
  - Flange Type 3b : 21.50 lbs. (9.8 kg)

Packaged Dim. & Wt.	
7"Øx40"	(24.00 lbs.)
7"Øx40"	(34.50 lbs.)
8"Øx40"	(39.50 lbs.)
8"Øx40"	(24.25 lbs.)
8"Øx40"	(27.00 lbs.)
7"Øx52"	(25.50 lbs.)
7"Øx52"	(36.00 lbs.)
8"Øx52"	(41.00 lbs.)
8"Øx52"	(25.50 lbs.)
8"Øx52"	(28.50 lbs.)
7"Øx96"	(46.00 lbs.)
7"Øx96"	(46.00 lbs.)
8"Øx96"	(48.00 lbs.)
8"Øx96"	(48.75 lbs.)
8"Øx96"	(54.50 lbs.)

Lubrication:

- Flow-Through (Media Lubricated)

Pressure Range - Fluid:

- 0-1000 PSI (69 Bar)
- Reduced seal life to be expected in upper operating range.

Pressure Range - Air:

- 0-10 PSIG (0-0.68 Bar)
- Consumption
  - 1.4 - 3.1 SCFM (40-88 l/min.)

Temperature Range:

- Static : 300°F (148.89°C)
- Operational : 200°F (93.33°C)

Inlet Connection Type:

- See table to the left; Others On Request

Minimum Tank Opening Requirement & Turn Radius

- Tank Opening : 2.987" (75.87mm)
- Turning Radius : 2.4" (60.96mm)

Surface Finish:

- ≤ 25 Ra μ (Micro Inch) - External as standard
- ≤ 15 Ra μ (Micro Inch) - Electropolished
- Others on request

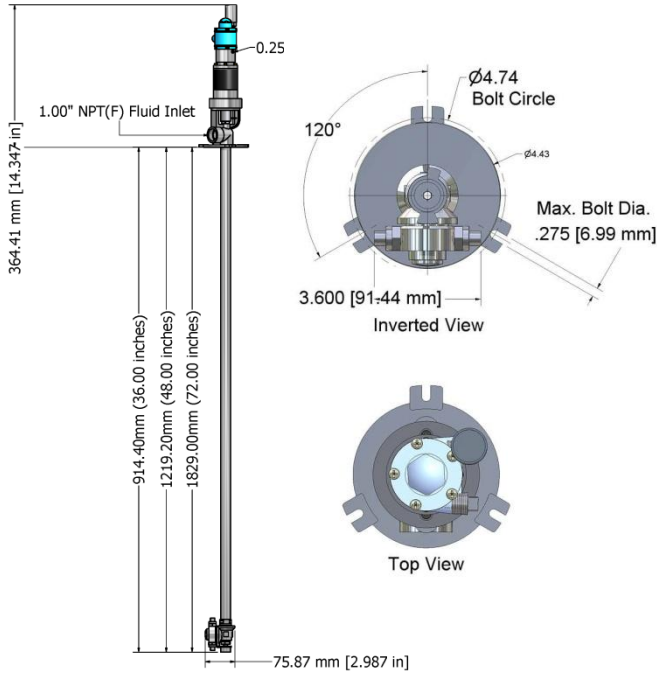
Connections:

- See dimensional diagram for standards

Gear Ratio (Fixed to Moving Gear):

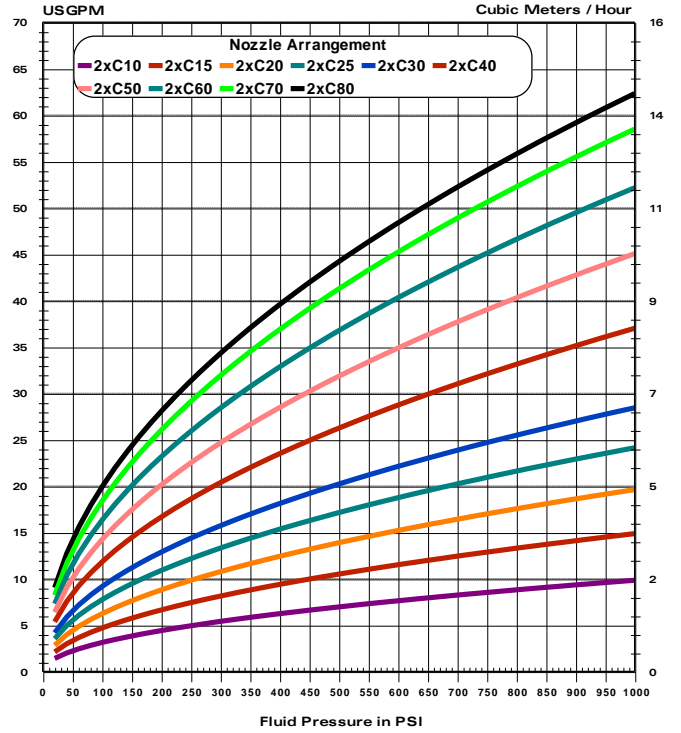
- 35/36 as standard (35 on hub with 36 on shaft)

### Dimensional Information

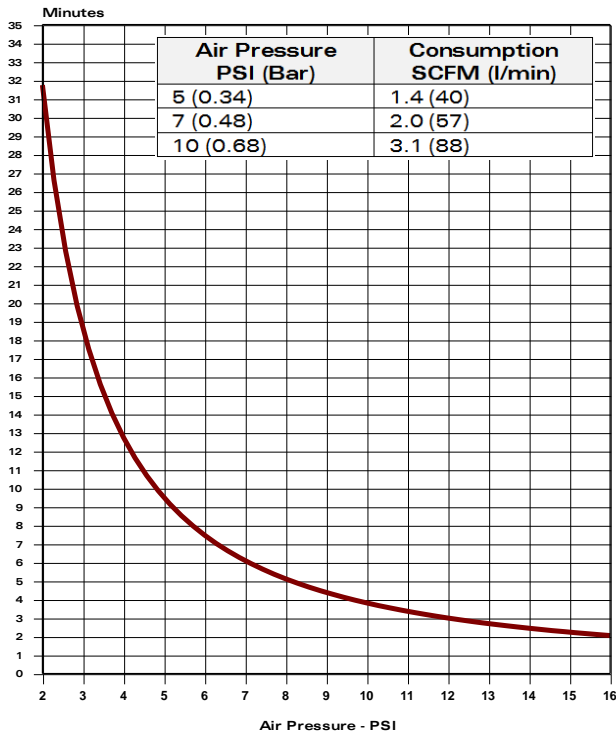


Flange dimensions shown here are for the Standard 3 Prong Flange Only. For other dimensions, contact Engineering.

### Pressure/Flow Curve



### Time to Establish One Pattern



### Jet-Length

