



## Product Data Sheet

Product : Tank Cleaning Machine  
 Model : LTQ (FT Only)

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

### Industries

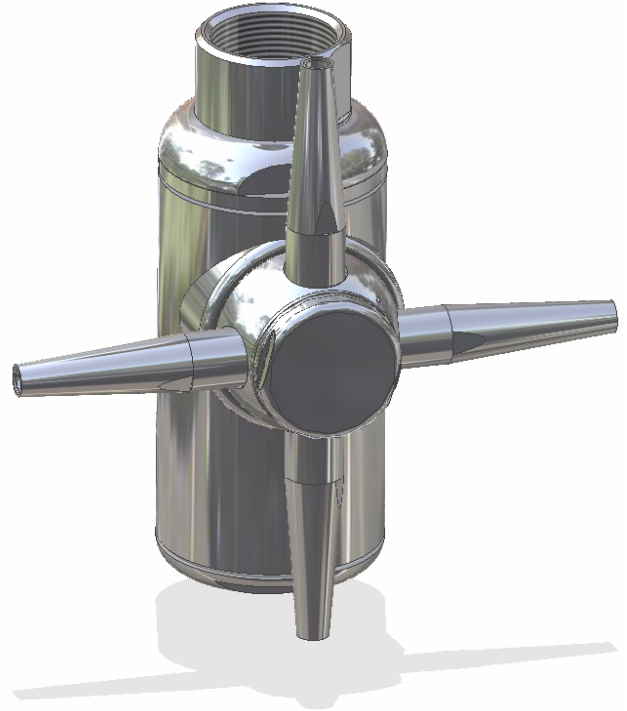
The Butterworth Type LTQ is a highly versatile machine and is applicable in most all types of tanks for process, storage, and transportation. Tank capacities range from 13,000 to 130,000 US gallons (50-500 M<sup>3</sup>)

### Operational

The Butterworth Type LTQ 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 65 axial revolutions of the body have been completed. During the process of this pattern build out, 8 cycles are established with each cycle increasing the density of the pattern matrix.

### User Benefits

- Hygienic Design
- High Jet-Stream Impact
- Reduced Cleaning Times
- Reduced Effluent Generation
- Reduced Energy Costs
- 100% Self-Rinsing (for specific models)
- Improved Capital Equipment Utilization



### Type LTQ - Model Reference Table

Model #	Nozzles	Inlet	Lubrication	Surface Finish (Ext-Std)
LTO634Z31NOFT	4 x 6.0mm	1.50" NPT(F)	Media	≤ 25 Ra μ
LTO734Z21NOFT	4 x 7.0mm		Media	≤ 25 Ra μ
LTO834Z21NOFT	4 x 8.0mm		Media	≤ 25 Ra μ
LTO634Z31BOFT	4 x 6.0mm	1.50" BSP(F)	Media	≤ 25 Ra μ
LTO734Z21BOFT	4 x 7.0mm		Media	≤ 25 Ra μ
LTO834Z21BOFT	4 x 8.0mm		Media	≤ 25 Ra μ

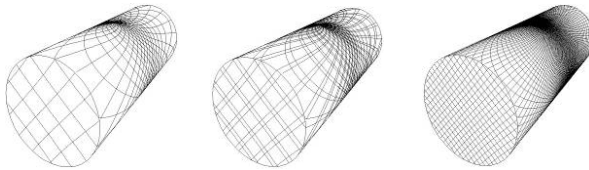
(Other Connection Types On Request)

### Part Number Reference Guide

#### LTQ 6 3 4 Z 3 1NOFT

LTQ = Machine Type; 6 = Orifice of Nozzle; 3 = Nozzle Design; 4 = Nozzle Hub Type; Z = Gearbox Type; 3 = Guide Vane Type; 1 = Impeller Type; N = Connection Type; OFT = Lubrication Methodology

### Cleaning Pattern Simulation



Horizontal Cylindrical Tank

### Specifications - Summary

#### Materials Of Construction (As Standard):

- 316 Stainless Steel/CD4-MCU Duplex S/S
- See manual for parts detail

#### Weight:

- 14 lbs. (6.35 kg)

#### Lubrication:

- Flow-Through (Media Lubricated)

#### Pressure Range:

- 0-300 PSI (21 Bar)

#### Jet-Length Radius:

- 0-72' (22.0 M)

#### Temperature Range:

- Static : 300°F (149°C)
- Operational : 300°F (149°C)

#### Inlet Connection Type:

- 1 1/2" NPT (F)
- 1 1/2" BSP (F)
- Weld
- Cam & Groove
- Tri-Clamp
- Others on request

#### Minimum Tank Opening Requirement & Turn Radius

- Tank Opening: 6.425" (163.20mm)
- Turning Radius: 4.860" (123.45mm)

#### Surface Finish:

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

#### Certified Dimensional Drawing Number:

- DWG1604

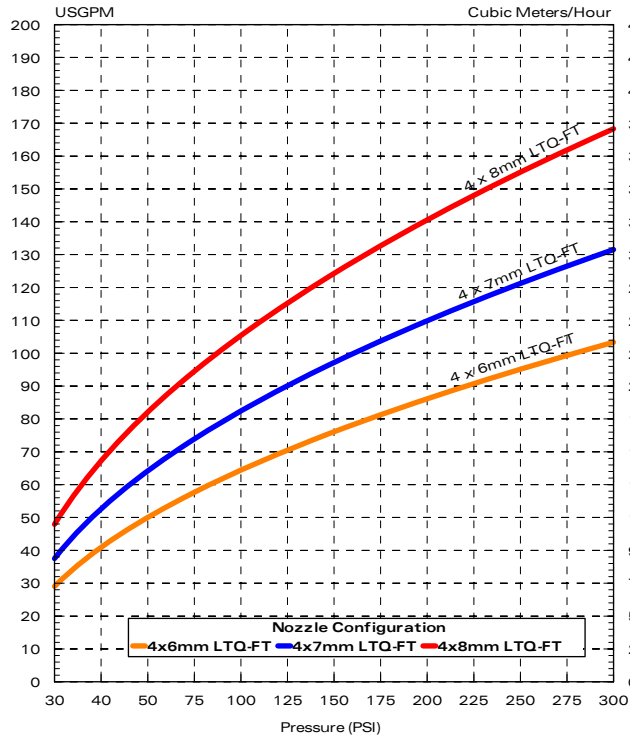


## Product Data Sheet

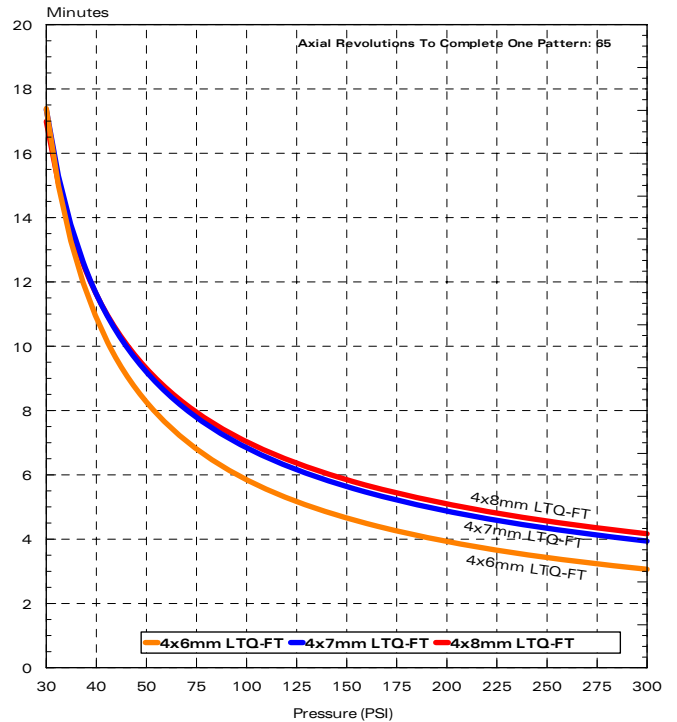
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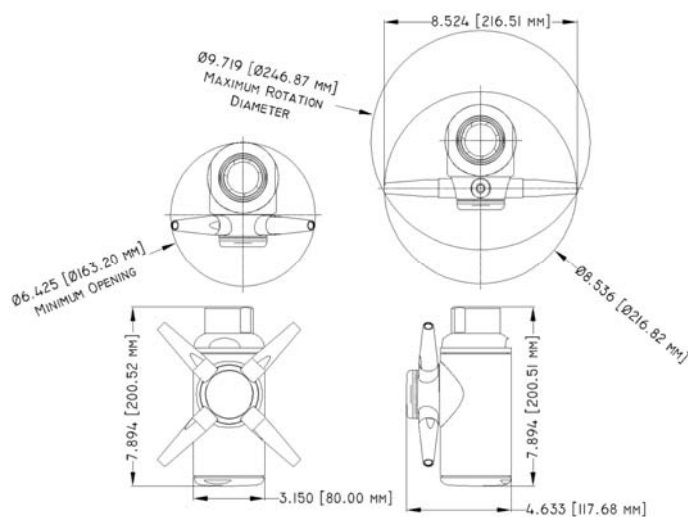
### Flow/Pressure



### Pattern Time



### General Dimensions



### Jet-Length (Radius)

