



# Product Data Sheet

## Product: Tank Cleaning Machine

### Type: LT & LT-FT

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

#### Industries

The Butterworth LT is a highly versatile machine and is applicable in most all types of tanks for process, storage, and transportation. Tank capacities range from 500-150,000 gallons (2-570 M<sup>3</sup>) for one machine per tank and larger tanks where multiple machines are installed.

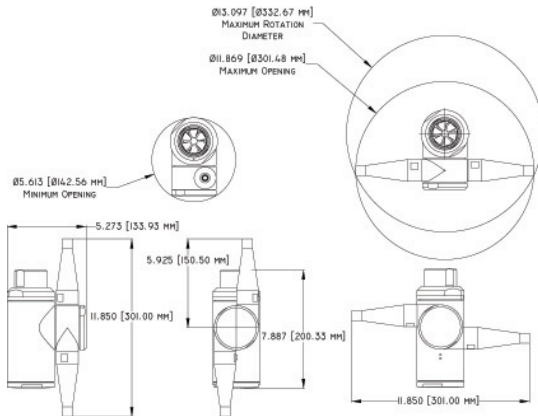
#### Operational

The Butterworth LT machine creates a pattern matrix-similar to a ball of twine (see cleaning pattern simulation in the lower right 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, 4 cycles are established with each cycle increasing the density of the pattern matrix.

#### User Benefits

- Elimination Of Confined Space Entry
- High Jet-Stream Impact
- Reduced Cleaning Times
- Reduced Effluent Generation
- Reduced Energy Costs
- Improved Capital Equipment Utilization

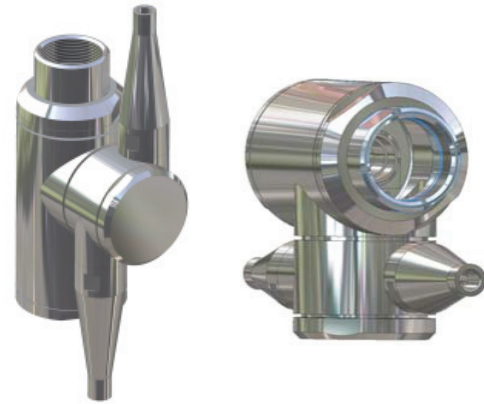
#### General Dimensions



#### TYPE LT - Model Reference Table

| Model #     | Nozzles  | Inlet        | Lubrication |
|-------------|----------|--------------|-------------|
| LT6ZM3NOFT  | 2 x 6mm  | 1.50" NPT(F) | Media       |
| LT8Z31NO    | 2 x 8mm  |              | Oil/Grease  |
| LT8Z31NOFT  | 2 x 8mm  |              | Media       |
| LT10Z21NO   | 2 x 10mm |              | Oil/Grease  |
| LT10Z21NOFT | 2 x 10mm |              | Media       |
| LT12Z21NO   | 2 x 12mm |              | Oil/Grease  |
| LT12Z21NOFT | 2 x 12mm | Media        |             |
| LT6ZM3BOFT  | 2 x 6mm  | 1.50" BSP(F) | Media       |
| LT8Z31BO    | 2 x 8mm  |              | Oil/Grease  |
| LT12Z31BOFT | 2 x 8mm  |              | Media       |
| LT12Z21BO   | 2 x 10mm |              | Oil/Grease  |
| LT12Z21BOFT | 2 x 10mm |              | Media       |
| LT12Z21BO   | 2 x 12mm |              | Oil Grease  |
| LT12Z21BOFT | 2 x 12mm | Media        |             |

*Custom Configurations on Request*



#### Specifications Summary

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

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

##### Weight:

- 15 lbs. (6.8 kg)

##### Lubrication:

- Flow-Through (Media Lubricated)
- Sealed Gearbox

##### Pressure Range:

- 0-300 PSI (21 Bar)

##### Jet-Length Radius:

- 0-58' (17.68 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
- Others on request

##### Minimum Tank Opening Requirement:

- 5.613" (142.56 mm)

##### Surface Finish:

- ≤ 25 Ra μ (Micro Inch) - External
- Others on request

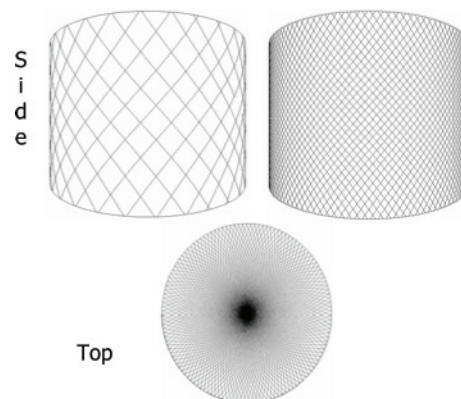
##### Packaged Dimensions & Weight / Per Machine

- DIM: 14"L x 6"W x 10"H
- Weight: Gross = 15.2 lbs Net = 15.0 lbs

##### Dimensional Drawing Number:

- DWG1637

#### Cleaning Pattern Simulation



# Butterworth

Butterworth, Inc.

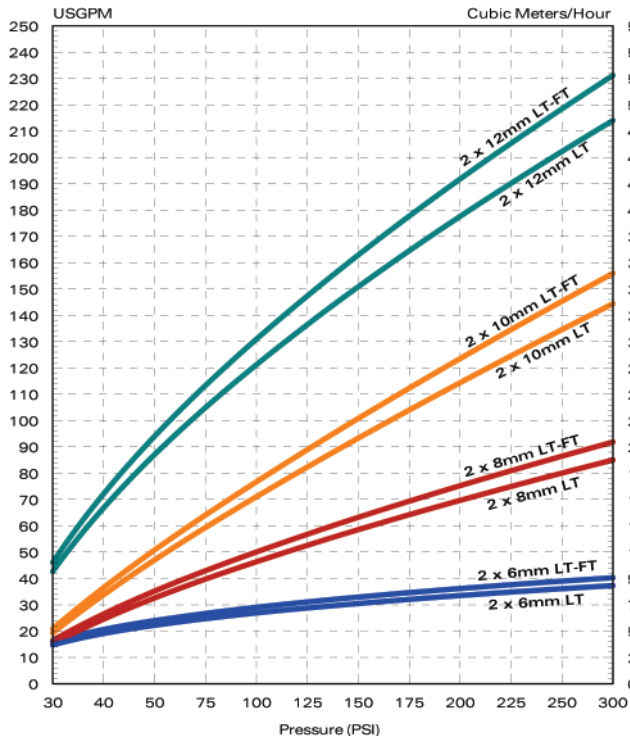
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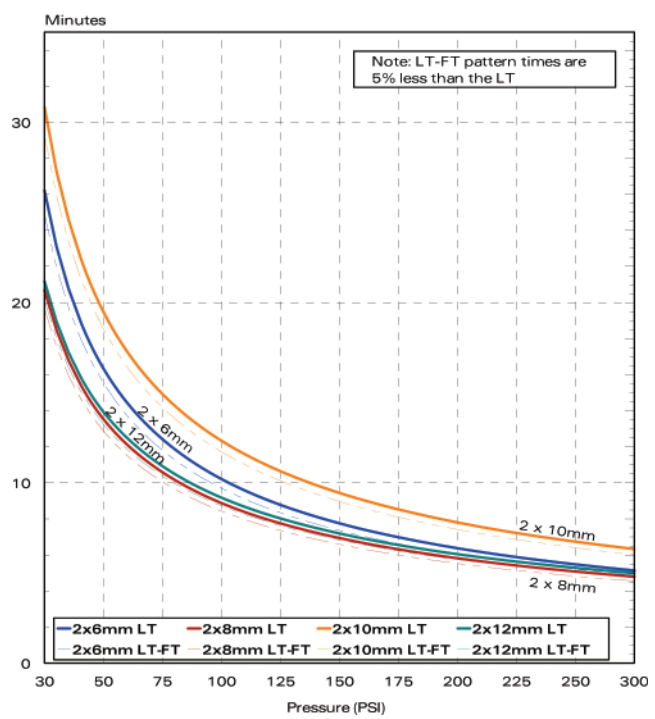


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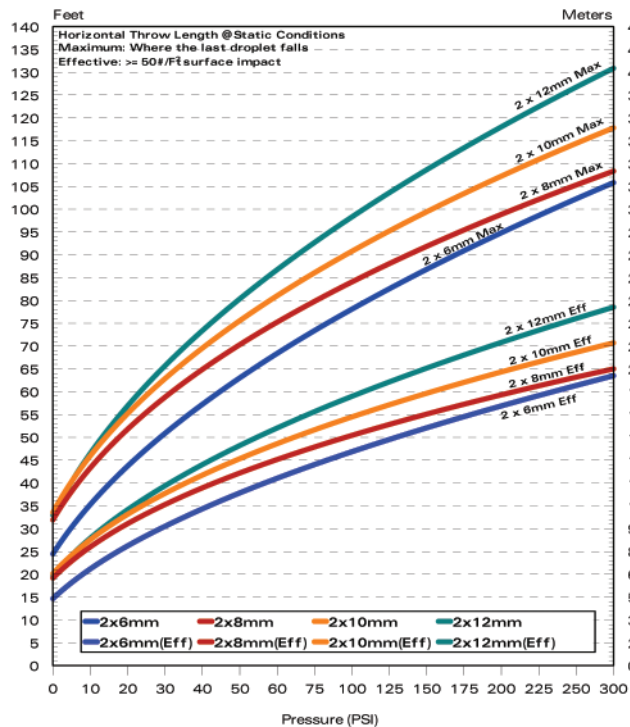
**Flow/Pressure**



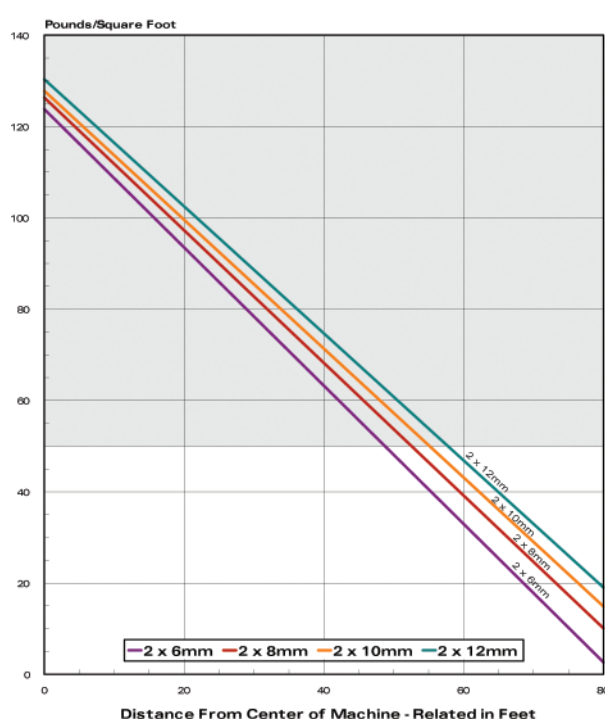
**Pattern Time**



**Jet-Length (Radius)**



**Impact Pressure @ 100 PSIG**



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**Important Notice:**  
 The curves presented here are summary in nature.  
 For a complete set of curves, contact Butterworth

Contact Butterworth for installation and engineering assistance.