



Product Data Sheet
Product: Tank Cleaning Machine
Type: 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 M3)

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

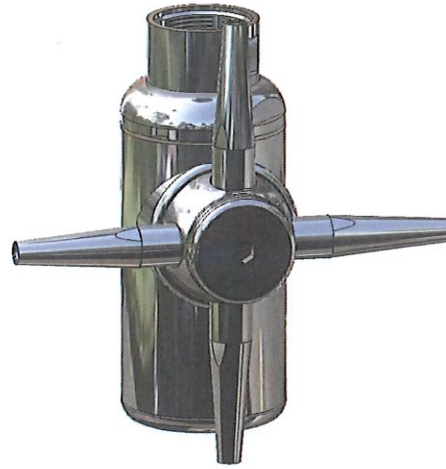
Model #	Nozzles	Inlet	Lubri- cation	Surface Finish
LTQ634Z31NOFT-01	4x6.0mm	1.50" NPT (F)	Media	< 25 Ra μ
LTQ734Z11NOFT-01	4x7.0mm		Media	< 25 Ra μ
LTQ834Z11NOFT-01	4x8.0mm		Media	< 25 Ra μ
LTQ1234Z11NOFT	4x12.0mm		Media	< 25 Ra μ
LTQ1434Z11NOFT	4x14.0mm		Media	< 25 Ra μ
LTQ634Z31BOFT-01	4x6.0mm	1.50" BSP (F)	Media	< 25 Ra μ
LTQ734Z11BOFT-01	4x7.0mm		Media	< 25 Ra μ
LTQ834Z11BOFT-01	4x8.0mm		Media	< 25 Ra μ
LTQ1234Z11BOFT	4x12.0mm		Media	< 25 Ra μ
LTQ1434Z11BOFT	4x14.0mm		Media	< 25 Ra μ

(Other Connection Types on Request) * = External standard

Part Number Reference Guide

LTQ 6 3 4 Z 3 1NOFT-01

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; -01 = Other info specific to part number



General Specification Options

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 – 40' (12.19M)

Temperature Range:

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

Inlet Connection Type:

- 1 ½" NPT (F)
- 1 ½" 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

Cleaning Pattern Simulation



Horizontal Cylindrical Tank

Butterworth

Butterworth, Inc.

16737 West Hardy Road, Houston, TX 77060

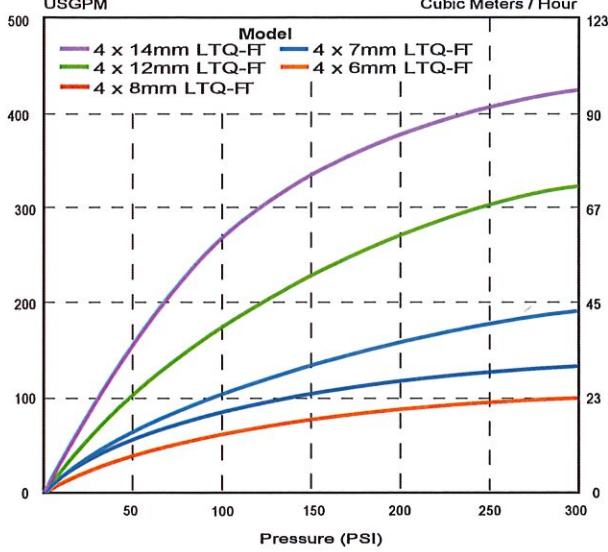
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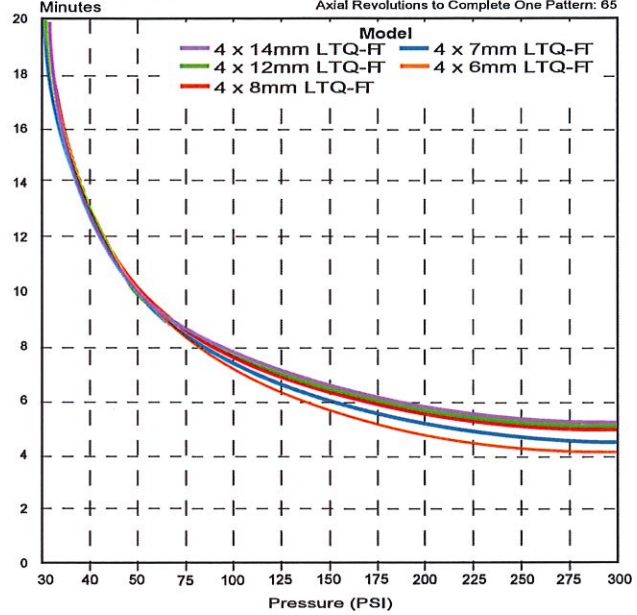
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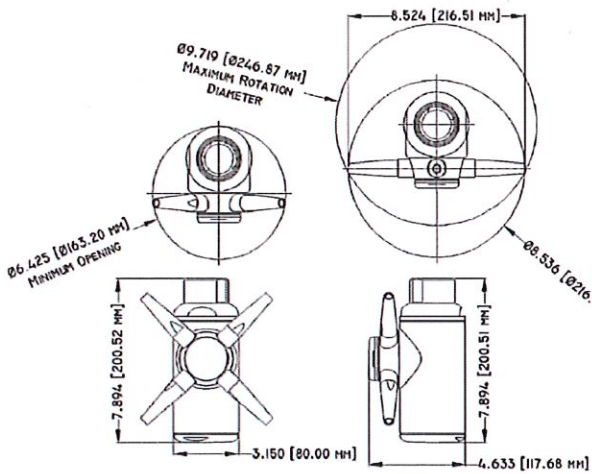
Flow/Pressure



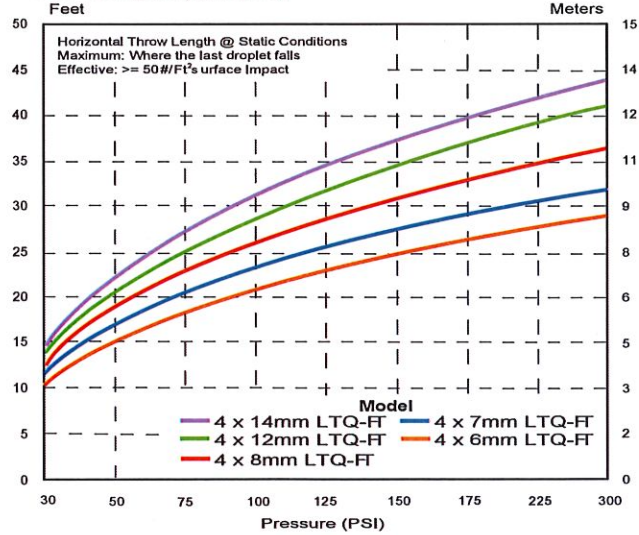
Pattern Time



General Dimension



Jet-Length (Radius)



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