



Magnets | Material Handling
Electronic Inspection | Service

Liquid Finger Trap Magnet

Series: LFT



1 Flowability and Strength Variations

Product is pumped through the magnet where ferrous tramp metal collects on either an array of 1" diameter magnetic tubes or a single 3" diameter magnetic tube. The tramp metal collects behind the tubes in the direction of product flow to prevent tramp metal wash off. Non-magnetic particles are separated by gravity and collect in the sump located in the bottom of the magnet enclosure.

2 Diameter Ranges

Standard inlet / outlet sizes available from 1.5" diameter up to 12" diameter (HP model required for sizes over 4" diameter)

3 Adaptable to Existing Lines

Easy installation into existing line using sanitary tri-clover, threaded or ANSI 150 pound inlet and outlet flanges

4 Tube Configuration for Easy Cleaning

Exclusive tube configuration for easy removal of ferrous tramp metal from magnetic tubes

5 Beauty Rings Protect Tubes from Impact

Welded tube support located on the bottom of the magnet element

- Ensures proper magnetic protection by eliminating bending of the tubes inwards due to product flow or handling during cleaning
- Increases magnet life by preventing broken welds on end of tubes caused by impact during cleaning

Maximum Pressure Levels

Designed for operating at up to 150 PSI maximum pressure (at 248°F) depending on model size

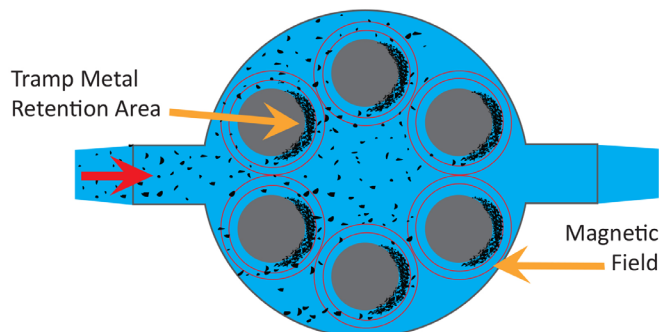
High Temperature Rating

Designed for operating temperatures up to 356°F depending on model configurations

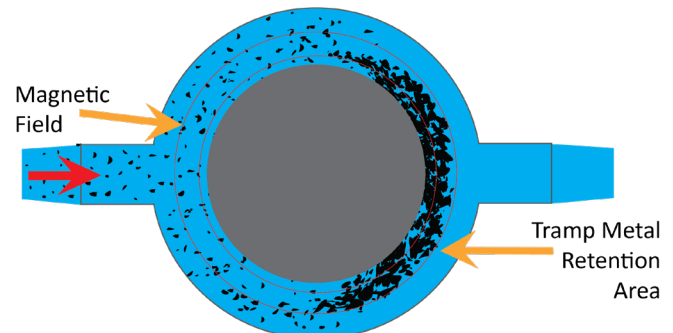
USDA Certified

USDA approved certified sanitary (USDA AMS NSF / ANSI / 3-A14159-1 2002) available

1" Tube Design



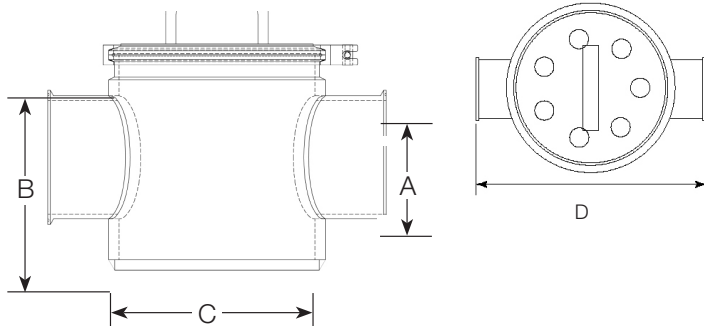
3" Tube Design



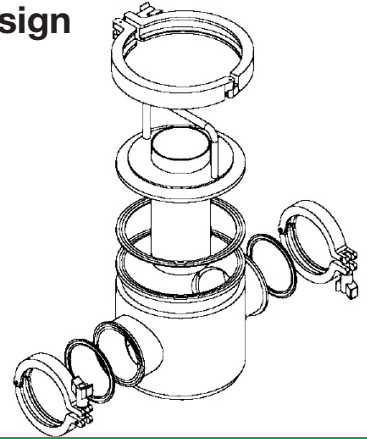
*Specifications subject to change

Series LFT Version 3.0 © MPI

1" Tube Design



3" Tube Design



Capacities - Gallons Per Minute / Liters Per Second

LFT SIZE		Fluid and Strained Product		Fibrous and Crushed Product		Viscous and Heavy Product	
IN.	MM.	GPM	LPS	GPM	LPS	GPM	LPS
2	51	1-64	.06-4.0	1-53	.06-3.3	1.0-33	.06-2.1
3	76	65-132	4.1-8.3	54-116	3.4-7.3	34-77	2.1-4.9
4	102	133-154	8.4-9.7	117-132	7.4-8.3	78-105	4.9-6.6
6	152	365-714	23-45	220-429	14-27	145-284	9-18

LFT Series Selection Guide

LFT Model #	Pipe Diameter "A"		Height "B"		Diameter "C"		Width "D"		Approx. Unit Weight		# MAGNETIC TUBES
	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	LBS.	KG.	
LFT-2	2	51	7	178	6.5	165	9	229	26	12	5
LFT-3	3	76	7	178	6.5	165	9	229	37	17	5
LFT-4	4	102	8	203	8.5	216	11	279	50	23	6
LFT-6	6	152	10.5	267	10.75	273	16.5	419	125	57	7

Liquid Trap Magnet Options

Pipe Size: Available in diameters from 1" to 6" in any increment.

Maximum Operating Pressure:

- 150 PSI at 248°F (standard on sizes 4" and smaller)
- 75 PSI at 248°F (standard on sizes 5" and larger)

Cleaning Method:

- **Manual clean (standard)**
- Manual quick-clean with sleeve over stripper for easy removal of tramp metal. Not recommended for sticky products. Sleeve over design reduces magnetic performance at contact.

Magnet Element: Four different styles are available depending on your application

- Array of 1" diameter tubes designed for liquids, purees, and products with solids 1/2" and smaller
- Single 3" diameter tube mounted in center of housing designed for products with fragments, solids or chunks up to 1" in size
- Plate magnet design with one or two plate magnets mounted on the outside of the product flow for very difficult flowing and fibrous products [Reference datasheet LPT]
- Combination magnet and screen design [Reference datasheet TW]

Material Construction:

- **304 Stainless Steel (standard)**
- 316 Stainless Steel

Magnetic Tubes [reference datasheet MT]:

- **REN Rare Earth (standard)**
- Hi-G high performance Rare Earth
- TW Thin Wall high performance Rare Earth

Magnetic Material Temperature:

- **176 F @ 52+ MGOe (rare earth) (standard)**
- 248° @ 48 MGO (rare earth)
- 356° @ 38 MGO (rare earth)
- 662° @ 28 MGO (rare earth)

Tube Coatings:

- **Stainless steel with no coating (standard)**
- Synergistic Coating [reference datasheet Synergistic Coating]

Gasket Material:

- **Buna material, temperature range: -40°F to 225°F (standard)**
- Viton material, color white, temperature range: -10°F to 400°F
- Customer specified

Inlet Flange Design:

- **Tri-Clover sanitary heavy duty quick-release clamp (standard)**
- NPT threads (for use of spin on flanges)
- ANSI 150 pound flange
- Plain end for welded pipe installation
- Customer specified

Outlet Flange Design:

- **Tri-Clover sanitary heavy duty quick-release clamp (standard)**
- NPT threads (for use of spin on flanges)
- ANSI 150 pound flange
- Plain end for welded pipe installation
- Customer specified

Water Jacket: For heating or cooling products

- **Not included (standard)**
- Included

Drain: Ball valve located on the bottom of the unit to drain before opening the magnet

- **Not included (standard)**
- Included

Lock Out Tab: Prevents unauthorized entry via customer supplied and installed pad lock

- **Not included (standard)**
- Included

USDA Magnet Certification:

- **Not included (standard)**
- Included