

## MAGNETIC IN-LINE LIQUID TRAPS

### Cartridge Style Magnetic Liquid Traps

Designed to provide continuous, dependable permanent magnetic protection in non-fibrous fluids environments. Trap design forces liquids through a tightly spaced grid of magnetic cartridges to ensure close contact between the product and the magnetic field.

- Tri-Clamp fittings are standard, I-line, threaded, pipe and flange fittings available.
- T-Style liquid trap available for 152mm or larger line sizes.
- High temperature (143° C) and High-Intensity (NHIT) Rare Earth magnets are standard
- Available in Sanitary and Food grades.



Cartridge Style Magnetic Liquid Trap

### Plate Style Magnetic Liquid Traps

Designed to remove ferrous particles from viscous and fibrous liquids and liquids containing larger suspended solids. These traps are designed to direct contaminants against a magnetic plate and into a deep magnetic field where they are captured and protected from the wiping action of the liquid flow.

- High temperature (143° C) and High-Intensity (NHIT) Rare Earth magnets are standard
- Standard 25mm to 100mm, inlet or flat, including 12mm sizes.
- Tri-Clamp fittings are standard, I-line, threaded, pipe and flange fittings available.
- Available in Sanitary and Food grades.



T-Trap Magnetic Liquid Trap Design



Plate Style Magnetic Liquid Trap

## MAGNETIC IN-LINE LIQUID TRAPS

Cartridge-Style Liquid Traps are the right choice for use with nonfibrous fluids that do not clog or contain solids larger than 1 cm in diameter. For liquids that are fibrous or contain large solids, Plate-Style Liquid Traps should be used. Once you have chosen the style and model you need based on the products you handle, you need to address sizing and select options compatible with your application on hand to prevent un-necessary downtime.

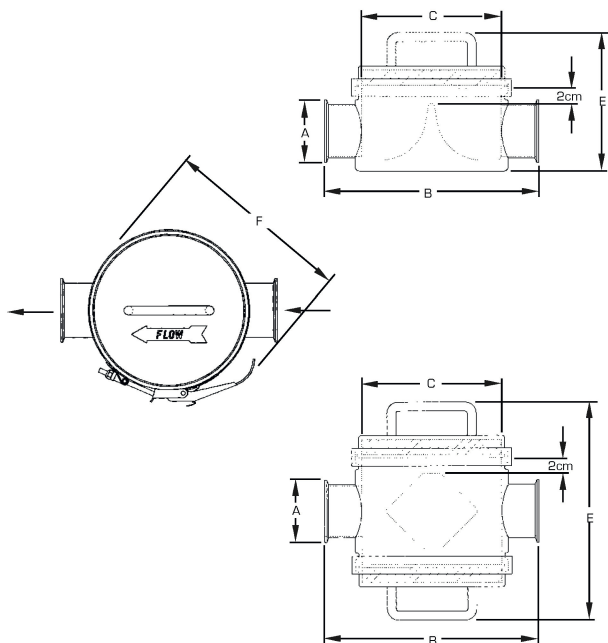
### Match Your Line Size and Flow Rate

Bunting Magnetic Liquid Traps are engineered and sized to provide ample magnetic protection at typical pipe flow rates. Using the table below, find the liquid trap(s) that match both the line size of your new or existing pipe or tubing and your flow rate requirements.

Flow In Liters Per Minute for Various Products\*

Model No.	Thin Liquids 0 - 500CP	Light Creams 500 - 5,000CP	Heavy Pastes 5,000 - 50,000CP	SemiSolid Fluids 50,000CP +
MLT-C/CSC-2"	473	360	227	114
MLT-C/CSC-3"	852	644	416	208
MLT-C/CSC-4"	1173	871	568	284
MLT-SP-2"	189	151	95	57
MLT-SP-3"	341	246	170	95
MLT-DP-2"	379	284	189	95
MLT-DP-3"-4"	681	492	341	180

\* Reduce the flow rates listed above by 50% for liquids that are crushed, fibrous, or contain suspended solids.



### Magnets Matched to Your Operating Temperatures

The standard magnet for Cartridge-Style MLT's is the Neodymium High-Intensity (NHI) load. This magnet is intended for use in temperatures up to 82°C. For high-temperature processing or where clean-in-place (CIP) systems might expose traps to elevated temperatures, specify our optional NHIT heat-resistant load. This Neodymium High-Intensity load is specially designed to operate in temperatures up to 149°C. Liquid Traps are available with an optional water jacket.

Plate-Style Liquid Traps come with N35UH magnets, which can handle temperature environments as high as 149°C.

### Expected Magnetic Performance Characteristics for Elevated Temperatures

Style	Mag Load	21°C	38°C	66°C	93°C	121°C	149°C
C, CSC	NHI	100%	97%	85%			
C, CSC	NHIT	100%	99%	96%	93%	89%	78%
SP, DP	N35UH	100%	98%	95%	92%	86%	75%

The magnetic loss from exposure to elevated temperatures is only partially recovered at lower temperatures.



### Single Plate Magnet Style

Model No.	A	B	C	E	F	Max. Press.	Net. Wt.
MLT-SP-2	3cm, 4cm, 5cm	24	13	17	20	250 psi	8 kg.
MLT-SP-3	6cm, 8cm	30	20	21	25	200 psi	18 kg.



### Dual Plate Magnet Style

Model No.	A	B	C	E	F	Max. Press.	Net. Wt.
MLT-DP-2	3cm, 4cm, 5cm	24	13	25	20	250 psi	11 kg.
MLT-DP-3	6cm, 8cm	30	20	32	25	200 psi	22 kg.
MLT-DP-4	9cm, 10cm	30	20	32	25	200 psi	22 kg.

## MAGNETIC IN-LINE LIQUID TRAPS

### Gasket Options

All Bunting Magnetic Liquid Traps use sanitary gasketing which is certifiable to Dairy 3-A and FDA standards. Buna-N (nitrile) is supplied as the standard gasket material with EPDM and Viton available as off-the-shelf alternatives. A replacement gasket is supplied with each trap. Keep extras on hand to prevent unnecessary downtime. Use the chart below to select the best gasket material for your application.

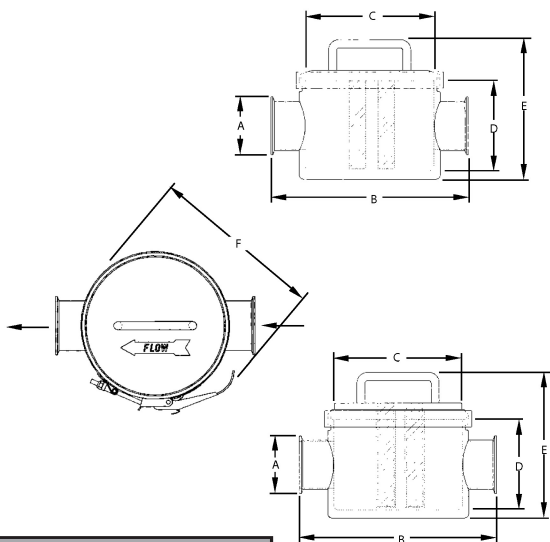
#### Gaskets

Property	Buna-N	EPDM	*Viton®
Temperature range	-40 to 107°C	-48 to 135°C	-29 to 204°C
Acid resistance	good	excellent	good
Alkali resistance	fair-good	good-excellent	poor-good
Petroleum oil resistance	excellent	poor	excellent
Vegetable oil resistance	good	good	excellent

\*Viton is a registered trademark of the E.I. Dupont de Nemours Co.

#### Fitting Options

All MLT's are supplied with two clamp fittings as standard equipment. But other fittings can be substituted to match your requirements. Choose from clamp, threaded bevel seat, and weld and pipe fittings in sizes 2cm thru 10cm.



**Note:** Maximum pressure rating for 210C. Each liquid trap is tested to 150% of rated pressure. MLT's are NOT ASME CODE certified. Before ordering, check local and state pressure vessel requirements.

#### Ordering Information

Part numbers for Bunting Magnetic Liquid Traps have four parts. The first is the abbreviation for Magnetic Liquid Traps: MLT. The second part stands for the style or model of trap. The third indicates the size or outside diameter of the unit. The fourth part includes as many suffixes as necessary to describe the options selected. For example: a 2" Single Plate-Style Trap with 1 1/2" bevel seat fittings, an EPDM gasket, and sanitary finish would be specified as: MLT - SP - 2" - G2 - S - 1.5 - B.

#### MLT Style

C = cartridge  
CSC = cartridge, self-cleaning  
SP = single plate  
DP = dual plate

#### Housing Size

5cm = for tube sizes to 5cm O.D.  
8cm = for tube sizes to 8cm O.D.  
10cm = for tube sizes to 10cm O.D.

#### Options (add as many suffixes as necessary)

#### Gasket

STD = Buna-N  
G2 = EPDM  
G3 = Viton

#### Temperature

STD = NHI (std-cartridge <82°C)  
T = NHIT (cartridge <149°C)  
STD = N35UH (std-plate <149°C)

#### Fitting Style Fitting Size

STD = tri-clamp  
B = bevel seat (male)  
W = weld fitting (plain)  
P = pipe (specify NPT size)

STD = 5cm, 8cm & 10cm  
XX = specify O.D. of tube

#### Water Jackets Finish

WJ = Water

Jacket F = food grade (STD-FDA compatible)  
S = sanitary grade (3A/USDA compatible, N/A on "CSC" style)

Options marked STD (Standard) do not need to be specified in part numbers when ordering.



#### Cartridge Style

Model No.	A	B	C	D	E	F	Max. Press.	Net. Wt.
MLT-C-2	3cm, 4cm, 5cm	24	13	11	18	20	250 psi	10 kg.
MLT-C-3	6cm, 8cm	30	20	14	22	25	200 psi	18 kg.
MLT-C-4	9cm, 10cm	30	20	20	27	25	200 psi	22 kg.

#### Self-cleaning Cartridge Style

Model No.	A	B	C	D	E	F	Max. Press.	Net. Wt.
MLT-CSC-2	3cm, 4cm, 5cm	24	13	11	20	20	250 psi	11 kg.
MLT-CSC-3	6cm, 8cm	30	20	14	23	25	200 psi	21 kg.
MLT-CSC-4	9cm, 10cm	30	20	19	28	25	200 psi	25 kg.



# MAGNETIC IN-LINE LIQUID TRAPS

## Gaskets

Bunting Magnetic Inline Liquid Traps use sanitary gasketing which is certifiable to Dairy 3-A and FDA standards. Viton® gaskets are used in both models of Inline Liquid Traps. A replacement gasket is supplied with each trap. Keep extras on hand to prevent un-necessary downtime.

### Gasket Specification

Property	*Viton®
Temperature range	-29°C to 204°C
Acid resistance	good
Alkali resistance	poor-good
Petroleum oil resistance	excellent
Vegetable oil resistance	excellent

\*Viton is a registered trademark of the E.I. Dupont de Nemours Co.



### Ordering Information

Part numbers for Bunting Magnetic Liquid Traps have four parts. The first is the abbreviation for Magnetic Liquid Traps: MLT. The second part stands for the style or model of trap. The third indicates the size or outside diameter of the unit.

#### MLT Style

I = inline

#### Housing Size

8cm = for tube sizes to 10cm O.D.  
10cm = for tube sizes to 10cm O.D.

#### Gasket

G3 = Viton®

#### Temperature

STD = NHIT (cartridge <149°C)

#### Fitting Style

STD = Tri-Clamp®

#### Fitting Size

STD = 8cm & 10cm

#### Finish

S = sanitary grade  
(3A/USDA compatible)

Model No.	A	B	C	Max. Press.
MLT+C-3	9cm	30cm	18cm	200 psi
MLT+C-4	11cm	30cm	20cm	200 psi

Specifications are subject to change without notice.

**Note:** Maximum pressure rating for 21°C. Each liquid trap is tested to 150% of rated pressure. MLT's are NOT ASME CODE certified. Before ordering, check local and state pressure vessel requirements.

