

Magnetic Separation Specification Guide

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Construction Standards

Utility Grade (BMC 50 Spec)

Separation equipment made to our utility grade specs is recommended for use in applications where products are inert and typically not intended for human consumption. Utility grade equipment is used primarily for handling granular or pelletized materials without concern for product retention.



Inside of Housing

Food Grade (BMC 200 Spec)

Food grade construction is designed for applications where products for human or animal consumption are handled as an ingredient in a finished product. Construction criteria assume that the product will undergo a finishing process that will eliminate the potential for bacterial contamination. Equipment features FDA-approved gaskets and seals. Stainless steel is the primary material. All mating panels are formed or welded into one continuous surface.



Inside of Housing

Sanitary Grade (BMC 300 Spec)

Sanitary grade units are made to be used where products destined for human or animal consumption are handled in final form. This grade follows many of the guidelines set by the USDA-3A standard for sanitary fabrication. These separators feature FDA-approved gaskets and seals and special interior and exterior finishes, including optional electro-polishing. Bunting® was the FIRST to have special sanitary grade models earn the USDA, AMS-Acceptance: They meet or exceed the USDA, AMS criteria as published in the NSF/ANSI/3-A 14159-1 2002 specifications and bear the USDA, AMS Meat and Poultry Accepted Equipment logo.



Inside of Housing

Construction Specifications

General Materials:

- 10-12 ga. mild steel standard where applicable.
- 11-13 ga. 304/316 stainless steel with rare earth magnets.
- Optional 316 stainless steel where required or upon request.

Magnetic Materials:

- Ceramic and neodymium NdFeB (rare earth) magnetic materials in various grades are standard. (Other magnetic materials, such as Alnico, are available upon request or for special applications.)

Construction:

- All seam welded or full seam welded utility grade standard on most models.
- Liquid tight, food grade, sanitary 3-A, and USDA optional finishes available.

Contaminant Removal:

- Ferrous fragments, nuts, bolts and other tramp metal with ceramic magnets.
- All sizes of ferrous metals including fines and 400 series and work hardened stainless steel with neodymium NdFeB (rare earth) magnets.

Cleaning Methods:

- Manual cleaning is standard, Manual Self-Cleaning option is optional on Manual Self-Cleaning models.
- Manual Self cleaning, pneumatic self cleaning, and continuous self cleaning available based on product required and application parameters.

Options:

- Adaptors and transitions with same specifications as construction above to fit all line sizes whether piping, ductwork, chutes, or other.

Comparison Table

	CERAMIC	NEODYMIUM								
GRADE	8	35SH	35	38	40	45	45SH	48SH	50	52
MAGNETIC CHARACTERISTICS										
MAX. ENERGY PRODUCT (Bd Hd) MAX. (MGO)	3.5	35	35	38	40	45	45	48	50	52
RESIDUAL INDUCTION Br. GAUSS	3850	11900	12150	12500	12900	13800	13500	13900	14300	14500
COERCIVE FORCE H _c -OERSTEDS	2950	11000	11050	11800	12300	10500	12000	12500	11500	10500
INTRINSIC COERCIVE FORCE H _{ci} -OERSTEDS	3250	>17000	13500	>12000	>14000	>11000	>17000	>19000	>110000	>11000
SATURATION MAGNETIZING FORCE H _s -OERSTEDS	10000	30000	30000	30000	30000	30000	30000	30000	30000	30000
RECOIL PEREABILITY	1.07	1.05	1.05	1.08	1.08	1.05	1.05	1.05	1.05	1.05
MAGNETIC ORIENTATION (ANISOTROPIC)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
MATERIAL CHARACTERISTICS										
DENSITY LB./IN. ³	0.177	2.75	0.268	0.268	0.269	0.268	0.274	0.279	0.268	0.274
CURIE TEMP. -F°	842	648	625	635	635	600	600	600	600	600
MAX PRACTICAL OPERATING TEMPERATURE -F°	480	300	180	180	180	180	300	300	180	180
REVERSIBLE TEMP. COEF * OF BR %/F°	0.105	0.052	0.066	0.066	0.061	0.61	0.067	0.067	0.061	0.067
HARDNESS ROCKWELL	---	Rc58	rC55	rC55	Rc58	Rc58	Rc58	Rc58	Rc58	Rc58

Expected Magnetic Performance Characteristics for Elevated Temperatures with NdFeB (Rare Earth) Magnets

Mag Load	70°F	100°F	150°F	200°F	250°F	300°F
NUHI	100%	95%	83%			
NHIT	100%	99%	96%	93%	89%	78%
NTC	100%	98%	95%	92%	86%	75%

* Exposure to elevated temperatures will only be partially be recovered at lower temperatures

Specifications are subject to change without notice.

Cartridge Magnets



Ordering Information

Part numbers for cartridges are divided into three parts. The first denotes the cartridge type. The second two-digit part gives the cartridge length in inches. The third denotes the magnetic material. Specify end option when ordering.

PART NUMBER EXPLANATION

Type

C40 = Standard cartridges
1" in diameter

HC50 = Heavy-duty cartridges
1 1/2" square

Size

04 = 4" length

08 = 8" length

10 = 10" length

18 = 18" length

Magnetic Material

CR = Ceramic (Not Available in Heavy Duty Cartridges)

AL = Alnico (not available in Heavy-Duty Cartridges)

NPB = Neodymium (NTC) Power-Balanced™ Rare Earth material

NHI = Neodymium High-Intensity Rare Earth material for the most demanding applications (not available in Heavy-Duty Cartridges)

NUHI = Neodymium Ultra High-Intensity Rare Earth material for the most demanding applications. Now even stronger (Not Available in Heavy Duty Cartridges)

Determine the right size and magnet strength for your application.

Cartridges intended for use in hoppers or similar applications should be arranged in multi-cartridge arrays and mounted high enough to cover twice the discharge opening area, so as not to restrict product flow.

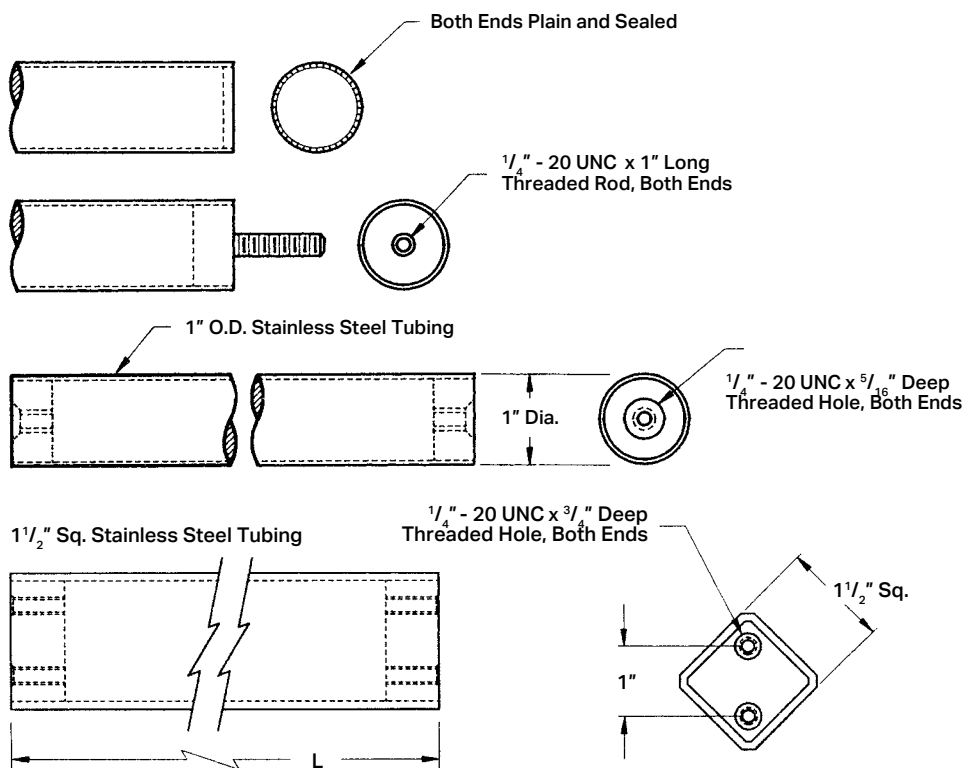
We recommend that you consult a Bunting sales engineer to select the magnetic material that is best suited to the materials, flow rates, and types of ferrous contaminants you encounter. Then find the corresponding part number from the table.

Standard and Heavy-Duty Cartridges

Length of Cartridge in Inches

Part Length	Ceramic Load	NPB Load	NEO Load	NHI Load	NUHI LOAD	Part Length	Ceramic Load	NEO Load	NPB Load	NHI Load	NUHI LOAD
4	C4004CR	C4004NPB	HC5004NE	C4004NHI	C49004NUHI	22	C4022CR	HC5022NE	C4022NPB	C4022NHI	C42022NUHI
6	C4006CR	C4006NPB	HC5006NE	C4006NHI	C4006NUHI	24	C4024CR	HC5024NE	C4024NPB	C4024NHI	C4024NUHI
8	C4008CR	C4008NPB	HC5008NE	C4008NHI	C4008NUHI	26	C4026CR	HC5026NE	C4026NPB	C4026NHI	C4026NUHI
10	C4010CR	C4010NPB	HC5010NE	C4010NHI	C4010NUHI	28	C4028CR	HC5028NE	C4028NPB	C4028NHI	C4028NUHI
12	C4012CR	C4012NPB	HC5012NE	C4012NHI	C4012NUHI	30	C4030CR	HC5030NE	C4030NPB	C4030NHI	C4030NUHI
14	C4014CR	C4014NPB	HC5014NE	C4014NHI	C4014NUHI	32	C4032CR	HC5032NE	C4032NPB	C4032NHI	C4032NUHI
16	C4016CR	C4016NPB	HC5016NE	C4016NHI	C46016NUHI	34	C4034CR	HC5034NE	C4034NPB	C4034NHI	C4034NUHI
18	C4018CR	C4018NPB	HC5018NE	C4018NHI	C4018NUHI	36	C4036CR	HC5036NE	C4036NPB	C4036NHI	C4036NUHI
20	C4020CR	C4020NPB	HC5020NE	C4020NHI	C4020NUHI						

Specifications are subject to change without notice.



Grate Magnets



To select the correct grate size for hoppers and similar applications, measure the area of the discharge opening in inches and double it, so as not to restrict product flow.

Then choose a standard grate from the table that comes closest to the size you've calculated. Grates can often be laid in place without a fixed mounting.

To order Heavy-Duty Grates, use the same formula. Heavy-Duty Grates are not available with baffles; nor are Alnico magnets a standard option for these grates. Call for more information about special applications and construction standards.

Ordering Information	Part Number Explanation			
<p>Part numbers for grates describe physical features. The numbers have four parts. The first two letters indicate separator type and shape. The second part consists of digits that give dimensions in inches. Rectangular grates have both width and length specified. The third and fourth parts do not appear in the table. They specify Heavy-Duty Grates, baffles, and magnetic material.</p> <p>*NPB - check with inside sales to see if still available **Not Available on Heavy Duty Grate Magnets</p>	<p>GS Type/Shape</p> <p>GR = Round Grate GS = Square or Rectangular Grate</p>	<p>12 18 Size</p> <p>4 = Round Grate with 4" diameter or Square Grate with 4" sides 12 18 = Rectangular Grate 12" wide with cartridges 18" long</p>	<p>A Options</p> <p>H = Heavy-Duty Grates P = Plain Style, no baffles A = Angular Baffles R = Rod Baffles</p>	<p>CR Magnetic Material</p> <p>CR = Ceramic** AL = Alnico (not available in Heavy-Duty Grate Magnets) NE = Rare Earth for HD Cartridges *NPB (NTC) = Neodymium Power-Balanced™ Rare Earth material NHI = Neodymium High-Intensity Rare Earth material for the most demanding applications (not available in Heavy-Duty Grate Magnets) NHIT = Neodymium High-Intensity Rare Earth material for high temperature use NUHI = Neodymium Ultra High Intensity **</p>

Standard Round, Square, and Rectangular Grates

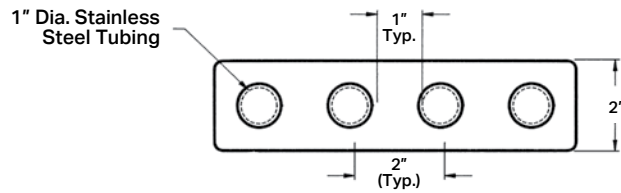
		Length of Cartridge																
		4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Width of Grate	4	GS-4 GR-4	GS-4 6	GS-4 8	GS-4 10	GS-4 12	GS-4 14	GS-4 16	GS-4 18	GS-4 20	GS-4 22	GS-4 24	GS-4 26	GS-4 28	GS-4 30	GS-4 32	GS-4 34	GS-4 36
	6	GS-6 4	GS-6 GR-6	GS-6 8	GS-6 10	GS-6 12	GS-6 14	GS-6 16	GS-6 18	GS-6 20	GS-6 22	GS-6 24	GS-6 26	GS-6 28	GS-6 30	GS-6 32	GS-6 34	GS-6 36
	8	GS-8 4	GS-8 6	GS-8 GR-8	GS-8 10	GS-8 12	GS-8 14	GS-8 16	GS-8 18	GS-8 20	GS-8 22	GS-8 24	GS-8 26	GS-8 28	GS-8 30	GS-8 32	GS-8 34	GS-8 36
	10	GS-10 4	GS-10 6	GS-10 8	GS-10 GR-10	GS-10 12	GS-10 14	GS-10 16	GS-10 18	GS-10 20	GS-10 22	GS-10 24	GS-10 26	GS-10 28	GS-10 30	GS-10 32	GS-10 34	GS-10 36
	12	GS-12 4	GS-12 6	GS-12 8	GS-12 10	GS-12 GR-12	GS-12 14	GS-12 16	GS-12 18	GS-12 20	GS-12 22	GS-12 24	GS-12 26	GS-12 28	GS-12 30	GS-12 32	GS-12 34	GS-12 36
	14	GS-14 4	GS-14 6	GS-14 8	GS-14 10	GS-14 12	GS-14 GR-14	GS-14 16	GS-14 18	GS-14 20	GS-14 22	GS-14 24	GS-14 26	GS-14 28	GS-14 30	GS-14 32	GS-14 34	GS-14 36
	16	GS-16 4	GS-16 6	GS-16 8	GS-16 10	GS-16 12	GS-16 14	GS-16 GR-16	GS-16 18	GS-16 20	GS-16 22	GS-16 24	GS-16 26	GS-16 28	GS-16 30	GS-16 32	GS-16 34	GS-16 36
	18	GS-18 4	GS-18 6	GS-18 8	GS-18 10	GS-18 12	GS-18 14	GS-18 16	GS-18 GR-18	GS-18 20	GS-18 22	GS-18 24	GS-18 26	GS-18 28	GS-18 30	GS-18 32	GS-18 34	GS-18 36
	20	GS-20 4	GS-20 6	GS-20 8	GS-20 10	GS-20 12	GS-20 14	GS-20 16	GS-20 18	GS-20 GR-20	GS-20 22	GS-20 24	GS-20 26	GS-20 28	GS-20 30	GS-20 32	GS-20 34	GS-20 36
	22	GS-22 4	GS-22 6	GS-22 8	GS-22 10	GS-22 12	GS-22 14	GS-22 16	GS-22 18	GS-22 20	GS-22 GR-22	GS-22 24	GS-22 26	GS-22 28	GS-22 30	GS-22 32	GS-22 34	GS-22 36
	24	GS-24 4	GS-24 6	GS-24 8	GS-24 10	GS-24 12	GS-24 14	GS-24 16	GS-24 18	GS-24 20	GS-24 22	GS-24 GR-24	GS-24 26	GS-24 28	GS-24 30	GS-24 32	GS-24 34	GS-24 36
	26	GS-26 4	GS-26 6	GS-26 8	GS-26 10	GS-26 12	GS-26 14	GS-26 16	GS-26 18	GS-26 20	GS-26 22	GS-26 24	GS-26 GR-26	GS-26 28	GS-26 30	GS-26 32	GS-26 34	GS-26 36
	28	GS-28 4	GS-28 6	GS-28 8	GS-28 10	GS-28 12	GS-28 14	GS-28 16	GS-28 18	GS-28 20	GS-28 22	GS-28 24	GS-28 26	GS-28 GR-28	GS-28 30	GS-28 32	GS-28 34	GS-28 36
	30	GS-30 4	GS-30 6	GS-30 8	GS-30 10	GS-30 12	GS-30 14	GS-30 16	GS-30 18	GS-30 20	GS-30 22	GS-30 24	GS-30 26	GS-30 28	GS-30 GR-30	GS-30 32	GS-30 34	GS-30 36
	32	GS-32 4	GS-32 6	GS-32 8	GS-32 10	GS-32 12	GS-32 14	GS-32 16	GS-32 18	GS-32 20	GS-32 22	GS-32 24	GS-32 26	GS-32 28	GS-32 30	GS-32 GR-32	GS-32 34	GS-32 36
	34	GS-34 4	GS-34 6	GS-34 8	GS-34 10	GS-34 12	GS-34 14	GS-34 16	GS-34 18	GS-34 20	GS-34 22	GS-34 24	GS-34 26	GS-34 28	GS-34 30	GS-34 32	GS-34 GR-34	GS-34 36
36	GS-36 4	GS-36 6	GS-36 8	GS-36 10	GS-36 12	GS-36 14	GS-36 16	GS-36 18	GS-36 20	GS-36 22	GS-36 24	GS-36 26	GS-36 28	GS-36 30	GS-36 32	GS-36 34	GS-36 GR-36	

All dimensions are in inches. Specifications are subject to change without notice.

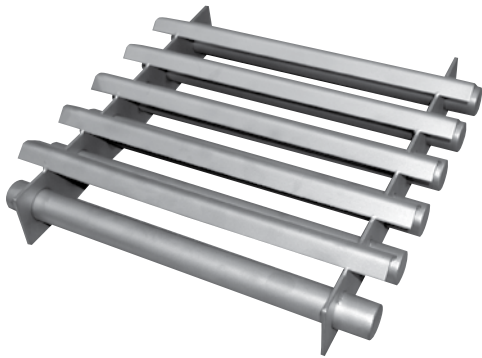
Grate Magnets



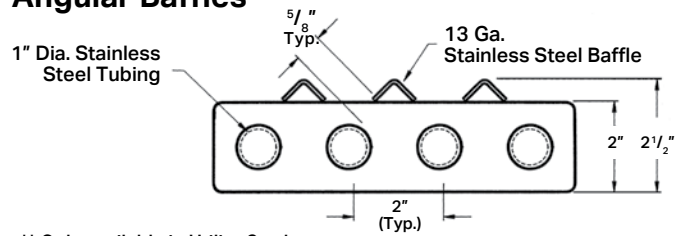
Plain Style* -



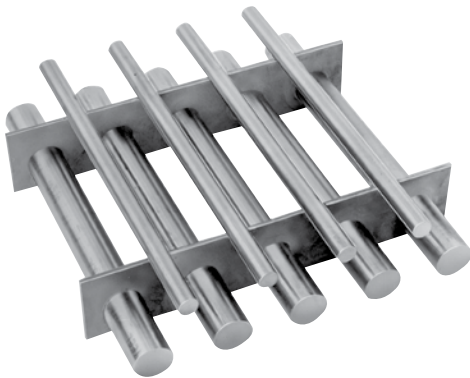
*Available with cartridges that are screwed on to avoid pockets forming



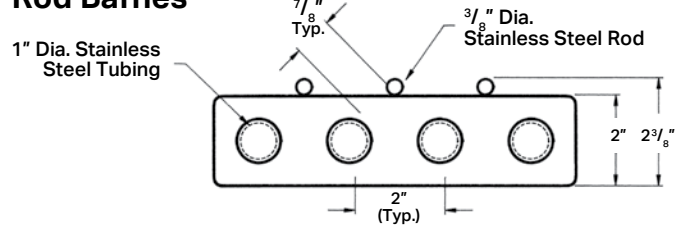
Angular Baffles **



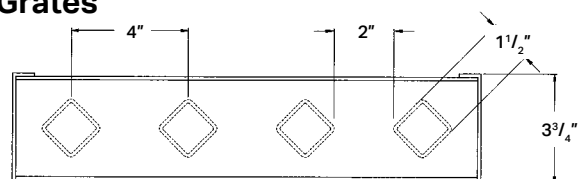
** Only available in Utility Grade



Rod Baffles



Heavy-Duty Grates



Torpedo Magnet

Torpedo Magnets are designed to be used in Just-In-Time (JIT) hopper loaders and are the best alternative to drawer magnets available.



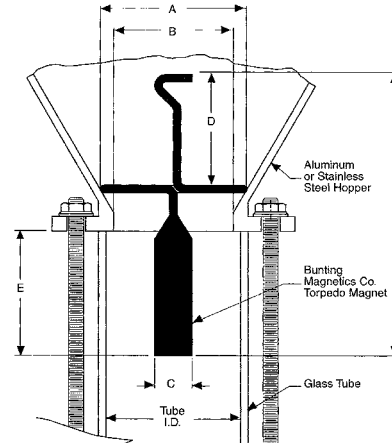
The Torpedo Magnet consists of a formed stainless steel ring, welded to a high-energy Rare Earth Magnetic Cartridge. The Magnet hangs suspended in the center of the JIT loader's glass tube. So tramp metal is captured before it can reach your plastic molding machine.

The bottom of the Torpedo Magnet is a live magnetic pole that allows tramp metal to collect and hide, preventing wipe-off back into the product stream.

Torpedo Magnets are available in either 1" or 5/8" diameter designs. We stock four sizes to fit most Just-In-Time loaders.

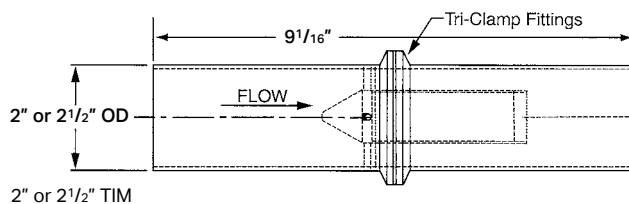
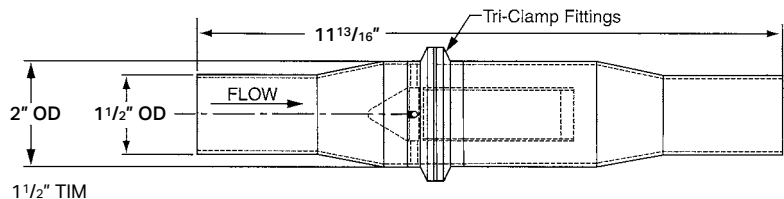
Part Number	A	B (Approx.)	C	D	E (Approx.)	F
21-00079	2 1/2	1 7/8	5/8	1 7/8	2 3/8	4 3/4
21-00080	2 1/2	2	1	1 7/8	3 11/16	6 1/4
21-00032	1 3/4	1 5/8	5/8	1 7/8	2 3/8	4 3/4
21-00034	1 3/4	1 5/8	1	1 7/8	3 11/16	6 1/4

Dimensions are in inches. Specifications are subject to change without notice.



Torpedo In-Line Magnet

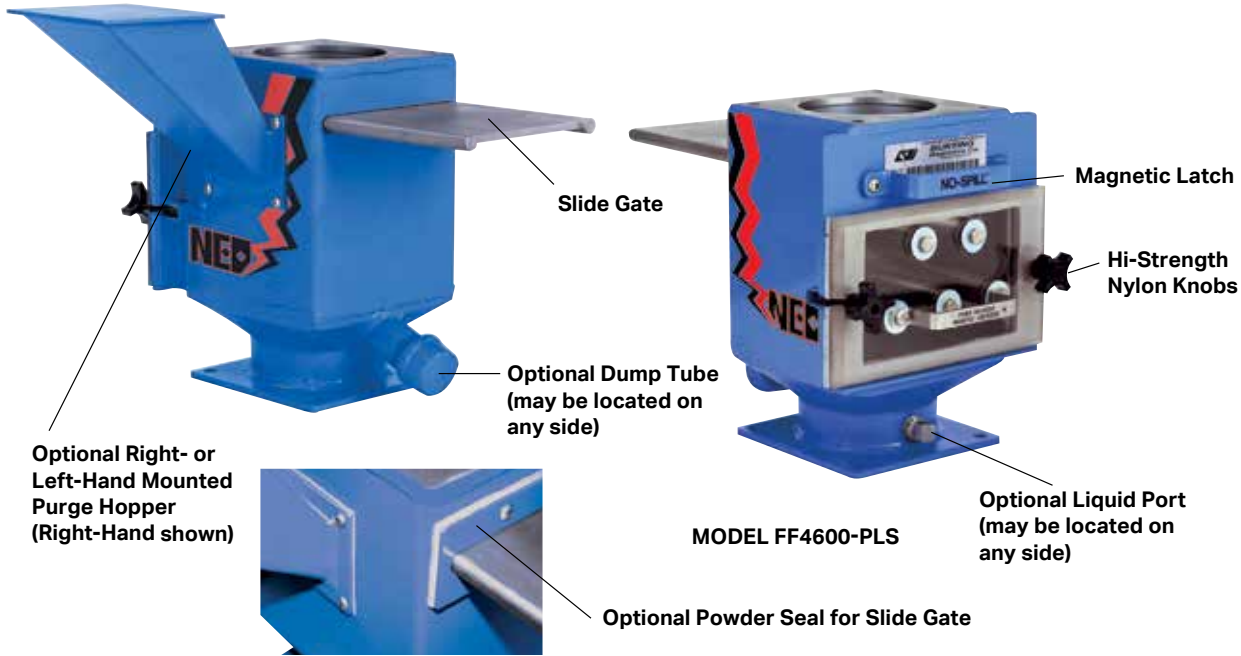
Torpedo in-Line Magnets (TIM) provide permanent magnetic protection for vacuum systems. They clamp directly into flexible hoses to capture ferrous contaminants from virgin or regrind material using Rare Earth Magnets. The compact TIM is an ideal choice for use between gaylords and vacuum loaders wherever limited overhead space prevents the use of a Bunting® Drawer Magnet.



STANDARD MODELS	
Model #	Line Size
TIM-15	1 1/2"
TIM-20	2"
TIM-25	2 1/2"

Specifications are subject to change without notice.

FF Series Drawer Magnet



Drawer Magnet Options

Patented No-Spill™ Slide Gate
 The patented No-Spill Slide Gate completely and positively shuts off product flow, so you don't have to worry about product spillage creating a mess or safety hazard when you remove the drawer for cleaning.

Purge Hopper
 Our Purge Hopper speeds clean-out of your equipment when changing color or compound – without sacrificing magnetic protection or taking the time to empty your hopper.

Dump Tube
 This option lets you empty the drawer housing and material hopper of plastic after a run has been completed.

Liquid Port
 The Liquid Port allows you to inject liquid color additive into the resin. The port can also be used to hold a temperature probe.

Powder Seal Kit
 This option prevents powder materials from leaking out around the Slide Gate – which is especially important in applications involving PVC or similar powder materials. The kit provides a compression seal around the Slide Gate. Order as original equipment or retrofit on site.

"NEO" Magnets - Standard
 Equipped with powerful Rare Earth magnets available. Featuring the only temperature-compensated, Rare Earth magnets for injection molding machines.

Stainless Steel Housing
 Built with a welded stainless steel housing for easy cleaning and durability.

EPDM Gasket
 Featuring a new EPDM gasket that resists heat aging and compression set.

Hi-Strength Nylon Knobs
 Fitted with high-torque nylon knobs that resist breakage.

Clear Polycarbonate Drawer Front
 Designed with a clear drawer front for easy viewing of product flow and captured contaminants.

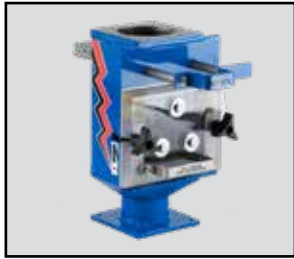
Magnetic Latch
 Exclusive magnetic latch locks the No-Spill Slide Gate open during operation, yet permits easy closing for purging and color changes.

Model number builder for standard units with additional options																
FF6	-	NTC	-	SL	-	H	-	P	-	SS	-	D	-	L	-	MSC
Type and size FF[size] FFL[size]		Magnetic Strength NTC NHI NHIT CER		Includes a slidegate		Includes purge hopper		Includes powder seal kit		Stainless steel		Includes dump tube		Includes liquid port		MSC PSC manual (leave blank)
Examples																
FFL4-NHI-SL-L 4" low profile FF with NHI mag load with slidegate and liquid port								FF10-NTC-H-SS-D 10" FF, NTC load with hopper, stainless steel construction and a dump tube								
FF10-NTC-H-SS-D 10" FF, NTC load with hopper, stainless steel construction and a dump tube																

FF Series Drawer Magnet

Drawer Magnet Selection Guide for Standard and Self-Cleaning FF Series

(Dimensions are in inches and keyed to drawings)



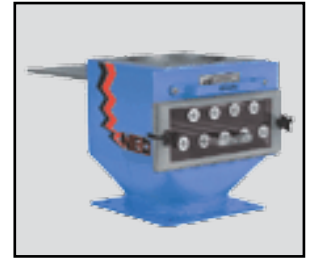
MODEL FF4
4x4



MODEL FF6
6x6



MODEL FF8
8x8



MODEL FF10
10x10

To select the right FF drawer follow the plan outline to select the right model number. First select the size you will need from either 4X4, 6X6, 8X8, 10X10. Add one number to model once the size has been determined such as FF6. If you need the FF to be a low profile add an L (ex FFL).

FF6

Next pick the strength of the magnetic you want.

NTC-NEO Temperature Compensated

NHIT-NEO High Temperature

NHI-NEO High Intensity

CER- Ceramic

FF6 NHI

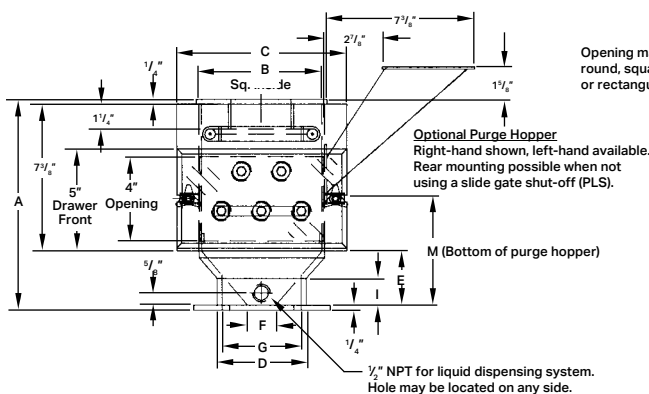
Look on the previous page to see if there is any additional components you wish to have on your FF drawer. Using the table at the bottom of the page add them to the model number in the order you wish. If there is an option that does not have an abbreviation write it in the description after the rest of the model number.

FF6 NHI SL H SS High Strength Nylon Knobs

Now you have your FF drawer model number. Remember when ordering to mention what size holes you wish to have on the flanges. Any design can be done as long as a design or size has been sent in. If you wish for 3 inch centers, gussets, extended tubes, or etc, make a note when placing your order.

Model	FF4	FF6	FF8	FF10*
A	10 ¹ / ₂	10 ³ / ₈	10 ⁷ / ₈	Varies
B	4 X 4	6 X 6	8 X 8	10 X 10
C	6 ¹ / ₂	8 ¹ / ₂	10 ¹ / ₂	12 ¹ / ₂
D	2 ⁵ / ₈	4 ³ / ₈	6 ³ / ₈	Varies
E	2 ⁵ / ₈	2 ³ / ₄	3	Varies
F	Min. Rnd. Opg. 7 ¹ / ₈	1 ³ / ₄	3 ¹ / ₈	Varies
G	Max. Rnd. Opg. 2 ¹ / ₈	3 ¹ / ₈	6	Varies
H	Max. Sq. Opg. 1 ¹ / ₂	2 ³ / ₄	4 ¹ / ₄	Varies
I	1 ¹¹ / ₃₂	1 ⁵ / ₁₆	1 ¹¹ / ₃₂	Varies
J	3 ¹ / ₈	7 ¹ / ₁₆	3 ¹ / ₄	Varies
K	Max. Opg. 3	5	6 ³ / ₄	8 ³ / ₄
L1 L2 L3	Per Customer Specifications			
M	6 ³ / ₈	6 ¹ / ₂	6 ³ / ₄	Varies

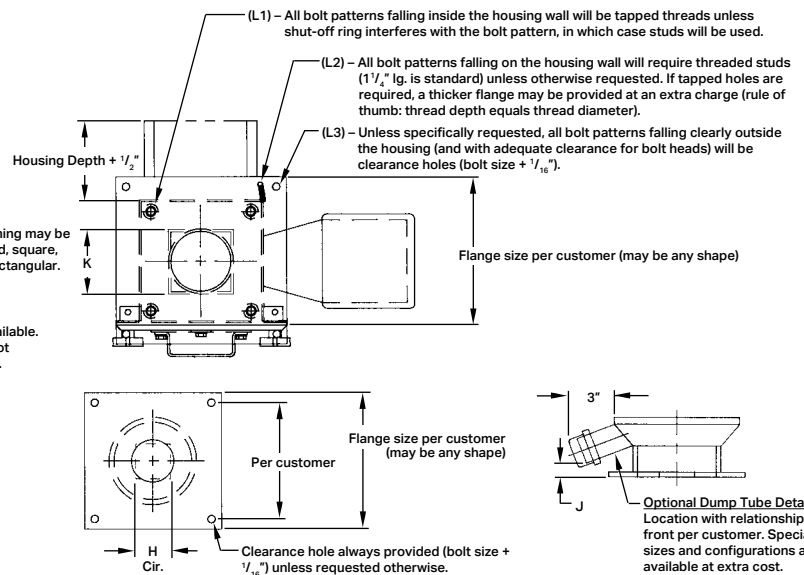
* Model FF4100PL/PLS is available with welded transition only (no casting).



Opening may be round, square, or rectangular.

Optional Purge Hopper
Right-hand shown, left-hand available.
Rear mounting possible when not using a slide gate shut-off (PLS).

1/2" NPT for liquid dispensing system.
Hole may be located on any side.



Easy Installation

Each of the four standard FF Series units is available with the original No-Spill™ Slide Gate – Bunting designed and patented – to provide safer and more convenient cleaning. All models are also available with self-cleaning drawer modules. Flanges are pre-drilled to OEM or customer specifications. Be sure to request the options, flange specifications, and hole locations you want when ordering.

Our new NEO Drawer Magnets are outfitted with super-strong Neodymium Rare Earth magnets that capture and hold ferrous metal particles so small that you may not be able to see them with the naked eye. Unlike competing Rare Earth drawer magnets that can permanently lose their magnetic fields at temperatures above 175° F, Bunting's exclusive design is the only temperature-compensated Rare Earth drawer magnet made for injection molding machines. It is guaranteed not to lose its permanent magnetic strength when bolted to feed throats operating at temperatures in excess of 175° F. That means less downtime for you with reduced screw wear and fewer plugged nozzles.

FF Series Drawer Magnet - High Temperature (Rated for temperatures up to 350° F)



Select Features

- Magnets: High temperature-compensated rare earth magnets; Superior cartridge geometry and construction increases reach-out and holding power while maximizing cartridge life
- Drawer Gasket: Viton sponge material rated to 400°F maximum temperature to resist heat aging and compression set
- Drawer Front: Polysulfone material resists temperatures up to 350°F intermittent temperature operation
- High-Torque Nylon Knobs: Resists breakage at temperatures up to 350°F
- Housing: Rugged easy-to-clean 11-gauge stainless steel housing built to support symmetrical 10,000 lb. compression loads
- Stainless steel center drawer guide makes removal and re-installation of the magnet drawer for cleaning quick and easy
- High-Temperature components are completely interchangeable with the standard FF Drawer Magnet

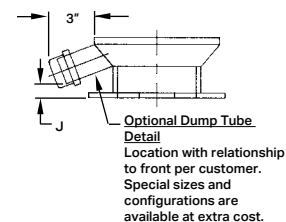
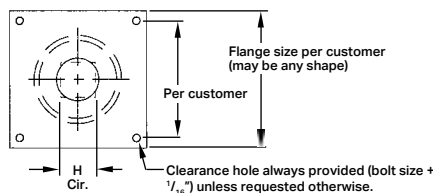
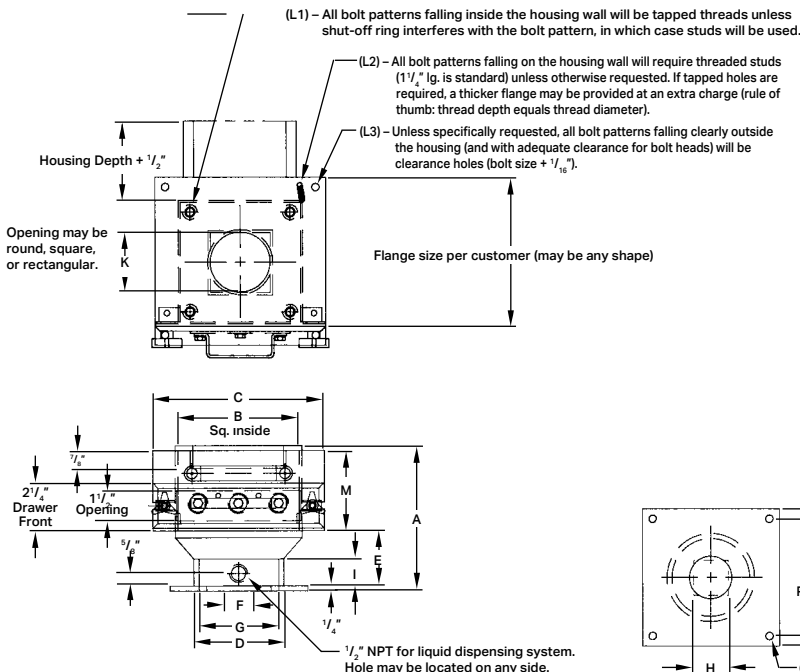
Low-Profile FF Series Drawer Magnet (FFL)



When headroom is critical, you need Bunting's Low-Profile Drawer Magnet. Get Bunting's proven design in a space-saving 5 15/16" overall height, without slide-gate. Standard features include a single row of our exclusive Permanent Magnetic Cartridges, clear polycarbonate drawer front, and rigid 10-gauge mild steel construction. You can even purchase these units with our original No-Spill™ Slide Gate option. Stainless steel construction and Rare Earth Magnetic Cartridges are also available. We'll pre-drill the unit's rugged 1/4" thick flanges to your specifications at no extra charge.

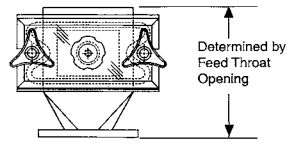
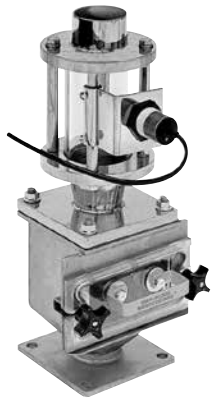
Low-Profile Drawer Magnet Selection Guide

Model	LP1600PL	LP1600PLS	LP1800PL	LP1800PLS
A	5 11/16	7 1/4	5 15/16	7 1/2
B	6 X 6	6 X 6	8 X 8	8 X 8
C	8 1/2	8 1/2	10 1/2	10 1/2
D	4 3/8	4 3/8	6 3/8	6 3/8
E	2 3/4	2 3/4	3	3
F Min. Round Opening	1 3/4	1 3/4	3 1/8	3 1/8
G Max. Bottom Opening	3 7/8	3 7/8	6	6
H Max. Square Opening	2 3/4	2 3/4	4 1/4	4 1/4
I	1 5/16	1 5/16	1 11/32	1 11/32
J	7/16	7/16	3/4	3/4
K Max. Top Opening	5	5	6 3/4	6 3/4
L1 L2 L3	Per Customer Specifications			
M	2 7/16	4	2 7/16	4

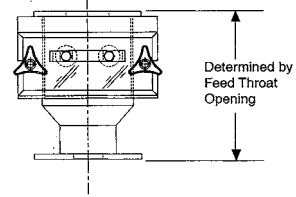
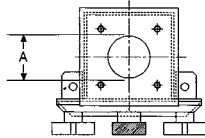


FFV Drawer Magnet

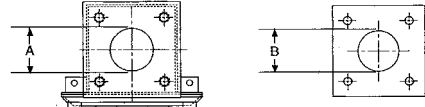
Our FFV Series Drawer Magnets are specifically designed for small volume, closed-loop "Just-In-Time" systems.



Model
FFSV1300-PL-NPB



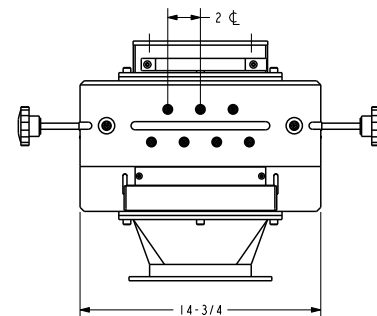
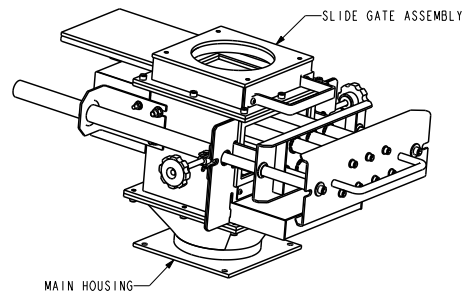
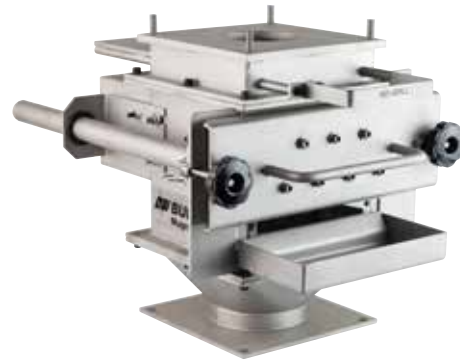
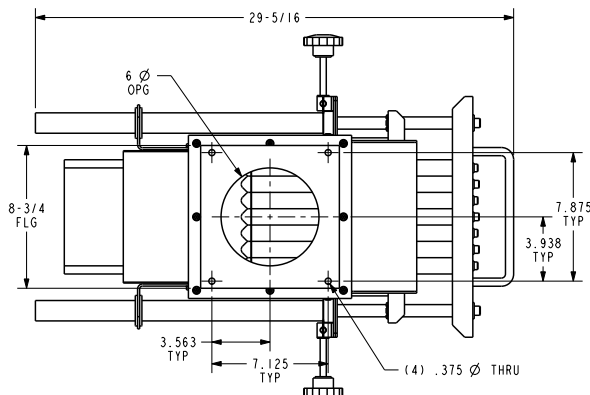
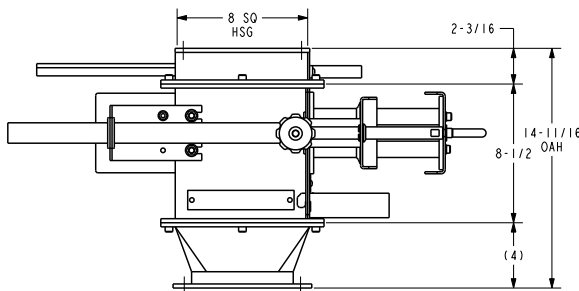
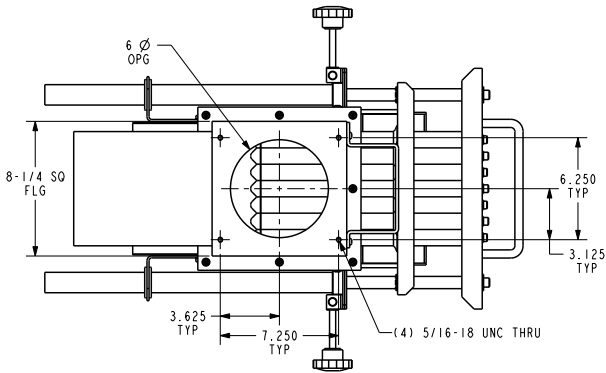
Model
FFSV1400-PL-CR
FFSV1400-PL-CR
FFSV1400-PL-NPB



Dimensions A and B per Customer Specs.

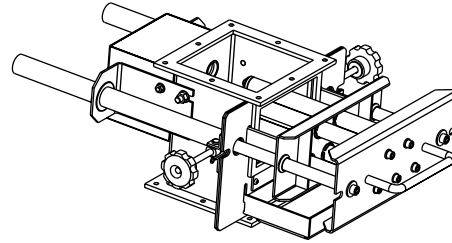
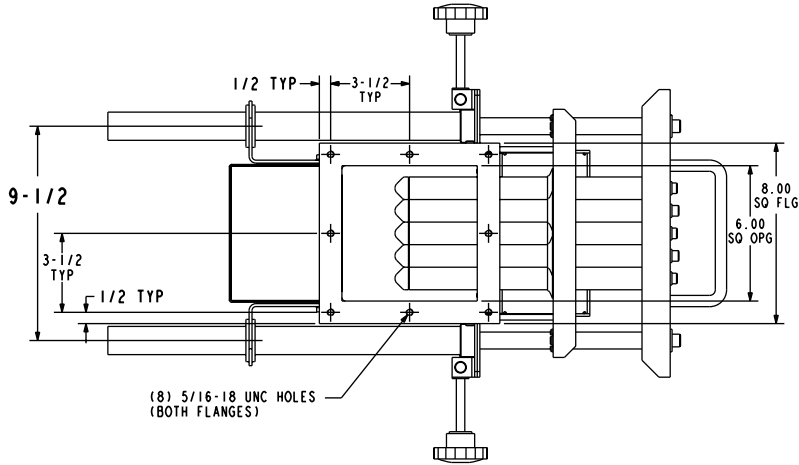
Manual Self-Cleaning FF Drawer Magnet

Available in 6", 8" and 12" models

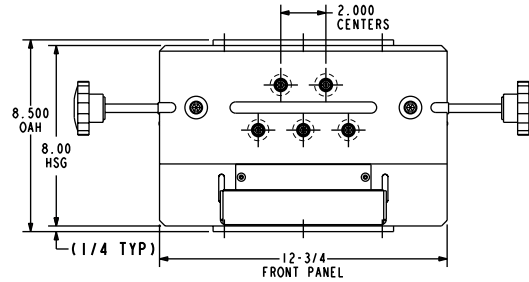
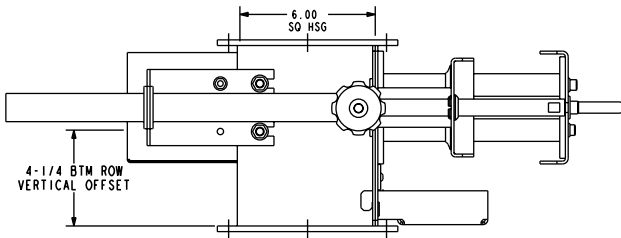


Manual Self-Cleaning FF Drawer Magnet

6" model - available with optional slide-gate

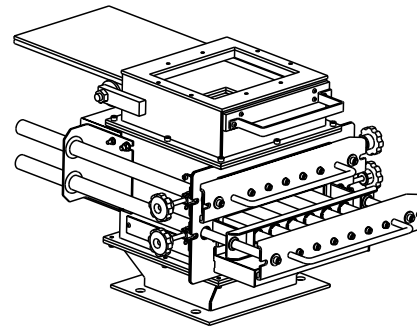
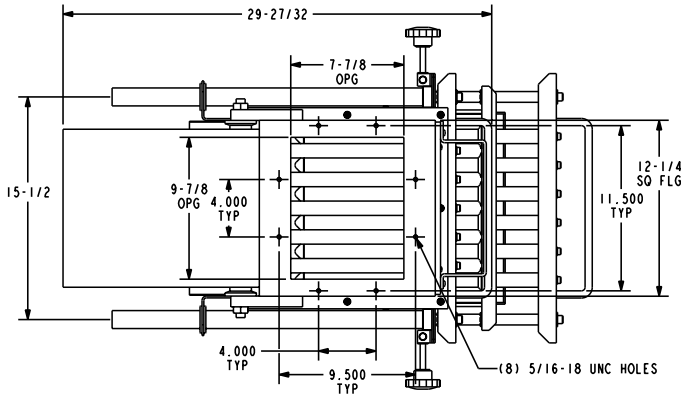


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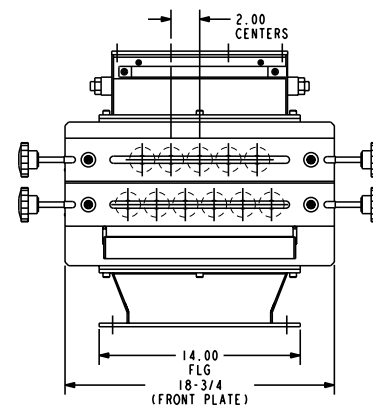
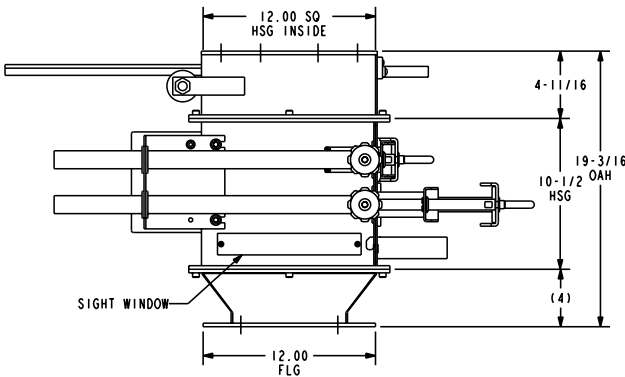


NOTE: Bottom flanges are identical. Top flanges can be modified.

12" model - available with optional slide-gate

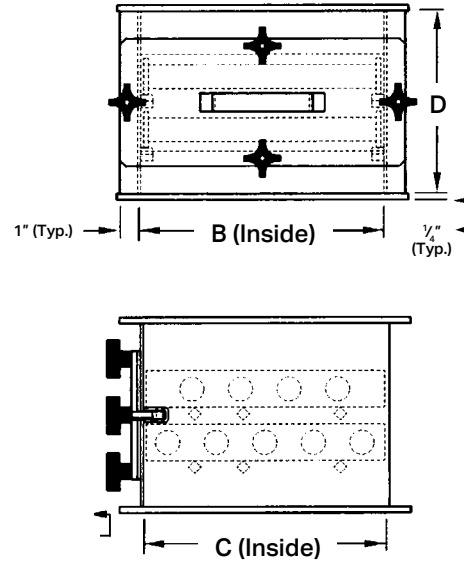
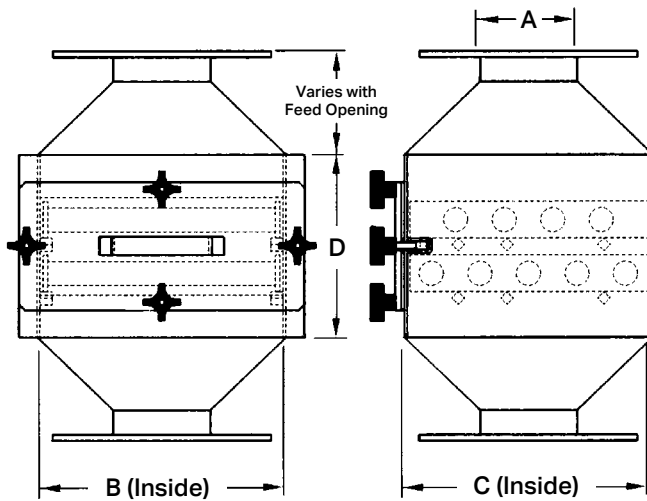


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HF Series Drawer Magnet

Metal detectable grommets and gaskets are standard on both models



HF Series Drawer Magnets

Dimensions in inches. Area in square inches.

Mild Steel Model No.	Stainless Steel Model No.	Housing Cross Section Area	A Square Spouting	A Round Spouting	B Width	C Depth	D Height
HF-2010	HFS-2010	100	6	6	10	10	6-1/2
HF-2012	HFS-2012	144	8	8	12	12	6-1/2
HF-2014	HFS-2014	196	9	10	14	14	6-1/2
HF-2016	HFS-2016	256	10	12	16	16	7 1/2
HF-2018	HFS-2018	324	12	13	18	18	7 1/2
HF-2020	HFS-2020	400	13	14	20	20	7 1/2
HF-2022	HFS-2022	484	14	16	22	22	7 1/2
HF-2024	HFS-2024	576	16	18	24	24	7 1/2
HF-2026	HFS-2026	676	17	19	26	26	7 1/2
HF-2028	HFS-2028	784	18	20	28	28	7 1/2

Available in 1 to 5 rows of magnets



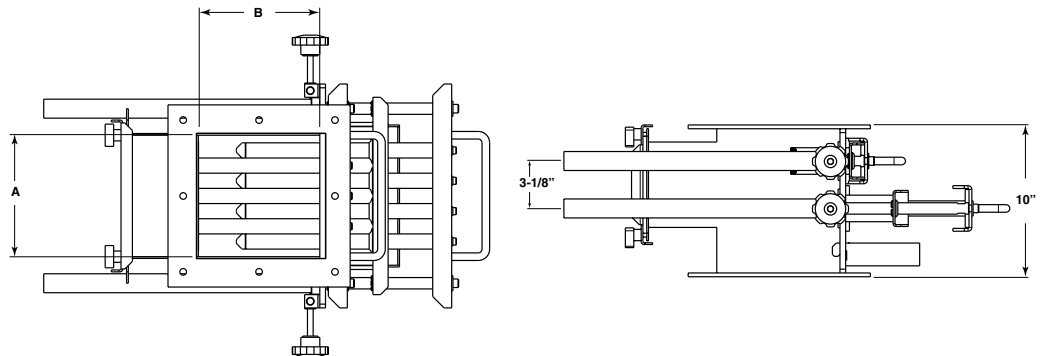
Manual Self-Cleaning HF Drawer Magnets

Dimensions in inches. Area in square inches.



HF Series Drawer Magnet with Standard Transitions

Model Number	Housing Cross Section Area	Square Spouting	Round Spouting	A	B
HFS2008-MSC	64	5	5	8	8
HFS2010-MSC	100	6	6	10	10
HFS2012-MSC	144	8	8	12	12
HFS2014-MSC	196	9	10	14	14



HF Series Drawer Magnet

Pneumatic Self-Cleaning HF Drawer Magnets

Dimensions in inches. Area in square inches.

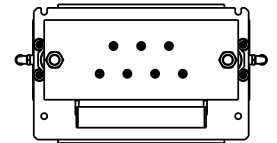
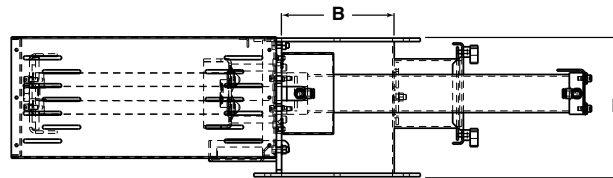
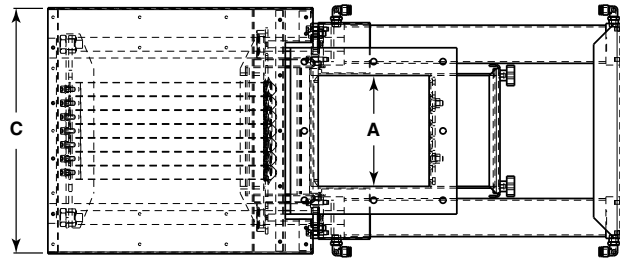


Model Number	Housing Cross Section Area	Square Spouting	Round Spouting	A	B	C	D
HFS2008-PSC	64	5	5	8	8	17.75	10
HFS2010-PSC	100	6	6	10	10	19.75	10
HFS2012-PSC	144	8	8	12	12	21.75	10
HFS2014-PSC	196	9	10	14	14	23.75	10
HFS2016-PSC	256	10	12	16	16	25.75	10.5
HFS2018-PSC	324	12	13	18	18	30.75	10.5
HFS2020-PSC	400	13	14	20	20	32.75	10.5
HFS2022-PSC	484	14	16	22	22	34.75	10.5
HFS2024-PSC	576	16	18	24	24	36.75	10.5



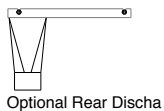
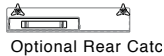
The Bunting® HF Series Drawer Magnet product line has earned the CE mark for the European Economic Area (EEA). The CE marking certifies that a product has met EU health, safety, and environmental requirements, which ensure consumer safety.

Specifications are subject to change without notice.



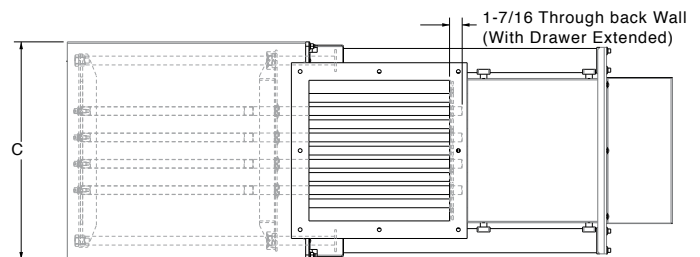
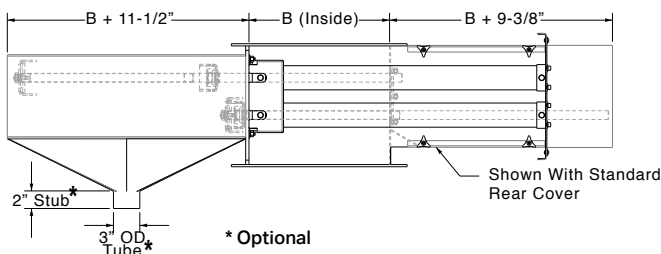
Continuous Pneumatic Self-Cleaning HF Drawer Magnets

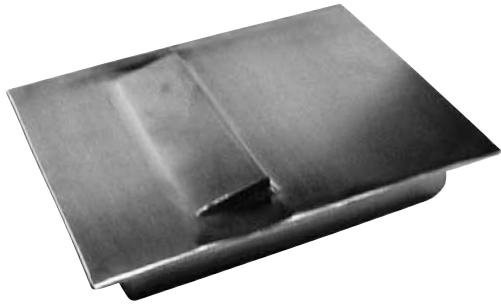
Dimensions in inches. Area in square inches.



Model No.	Housing Cross Section Area	Square Spouting	Round Spouting	A	B	C	D
HFS2008-CSC	64	5	5	8	8	16.75	14
HFS2010-CSC	100	6	6	10	10	18.75	14
HFS2012-CSC	144	8	8	12	12	20.75	14
HFS2014-CSC	196	9	10	14	14	22.75	14
HFS2016-CSC	256	10	12	16	16	24.75	14
HFS2018-CSC	324	12	13	18	18	26.75	14
HFS2020-CSC	400	13	14	20	20	28.75	14
HFS2022-CSC	484	14	16	22	22	30.75	14
HFS2024-CSC	576	16	18	24	24	32.75	14

Units available with 3 and 4 row trays. Add 4-1/4" to D for each additional row.





How to Select and Order Bunting Plate Magnets

The first part of the Model Number is *PM* for *Plate Magnet*. The second part is a code for the magnet that meets your product flow rate needs. The third part is a two-digit entry for the width you select. The remaining parts of the Plate Magnet Model Number are explained below, along with the selection steps. Here's a sample Model Number to show you what a complete one looks like.

PM	C65	24	P	M	H	U	S
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SPECIFICATIONS

General material: Construction is 302/304 stainless steel. Pole faces and tapered step faces are constructed of 410/416 stainless steel.

Magnet material: High-density Ceramic or Neodymium permanent magnets.

Magnet design: 2-pole, high reachout circuit with maximum retention.

Construction: Welded into an integral unit. Contaminant removal: Ferrous fragments, nuts, bolts, wire, and other tramp iron from free-flowing materials.

Method of cleaning: Manual, from outside of spouting by swing-away hinge and latch, or Manual Self-Cleaning.

Styles: Pole face. Tapered step face. Flat face.

Sizes: Available in 6 magnetic strengths and widths from 4" through 60" in 2" increments.

Uses: Mount in spouting or conveyor lines to remove ferrous contaminants from chemicals, plastics, grain, feedstuffs, foodstuffs, glass, etc.

Step 1:

Estimate the maximum flow rate through your chute in cubic feet per hour. Then use the *Ceramic* or *Rare Earth Adjustments* tables to adjust this flow capacity for the size of tramp iron you encounter and your chute angle. If the magnet will be more than two feet from the feed opening of a chute, increase required capacity by 10% for each additional foot. If you intend to mount two identical magnets within 6" of each other, reduce the required magnet capacity by 50%. This new figure is your revised maximum flow rate estimate.

Ceramic Application Adjustments

	Chute Angle		
	35 degree	45 degree	60 degree
Large Tramp 1 to 8 oz	Use 125% of Capacity	Use Capacity	Use 75% of Capacity
Small Tramp 8 mesh to 1 oz.	Use Capacity	Use 75% of Capacity	Use 50% of Capacity
Fine Tramp 8 mesh and less	Use 33% of Capacity	Use 25% of Capacity	Use 12% of Capacity

Rare Earth Application Adjustments

	Chute Angle		
	35 degree	45 degree	60 degree
Large Tramp 1 to 8 oz	Use 125% of Capacity	Use Capacity	Use 75% of Capacity
Small Tramp 8 mesh to 1 oz.	Use Capacity	Use 75% of Capacity	Use 50% of Capacity
Fine Tramp 8 mesh and less	Use 40% of Capacity	Use 30% of Capacity	Use 20% of Capacity

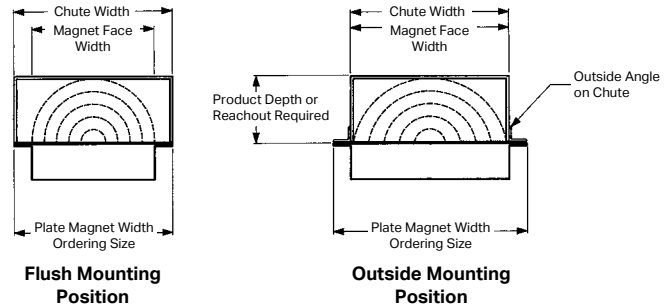
** Consult Bunting for suspended applications



Step 2:

Determine the widest Plate Magnet your chute or spouting will accommodate. Because of the mounting flanges, the actual width of the magnet face is 2" less than the Plate Magnet's overall width. This can create an area of unprotected product flow. To get maximum protection, consider getting a full-width magnet and using angle-iron mounts as shown in the illustration to the right.

Cross Section of Chute with Plate Magnets Installed



Step 3:

Now look at **Plate Magnet Capacities and Weights** table to see what size magnet you need. First find the width that's closest to the width of your chute or spouting, and look across the adjacent row of flow rates for the capacity that's closest to the maximum capacity you've estimated.

Notice that both Ceramic and Neodymium Plate Magnets come with three flow rate capacities for each width. These three strength levels are represented by model numbers. The model numbers (C30, C45, C65 and N35, N50, N65) indicate the vertical reachout of the magnetic field. For example, C45 has a 4.5-inch reachout; N50 has a 5.0-inch reachout. Select the reachout that most closely corresponds to the depth of your chute or spouting.

Neodymium magnets cost more than Ceramic, but Neodymium magnets can be from 40% to 60% lighter than Ceramic magnets with similar flow rate capacities.

Plate Magnet Capacities and Weights

Flow rates in cubic feet/hour. Weights in pounds (#).

Chute Width	Ceramic			Neodymium		
	C30	C45	C65	N35	N50	N65
8"	2280/18#	3370/36#	5800/82#	2240/11#	3200/21#	4160/38#
10"	2850/24#	4280/48#	7400/108#	2800/15#	4000/28#	5200/50#
12"	3420/30#	4900/59#	8980/134#	3360/18#	4800/34#	6240/62#
14"	3990/35#	5720/70#	10500/159#	3920/22#	5600/41#	7280/74#
16"	4560/41#	6430/81#	12000/185#	4480/25#	6400/48#	8320/86#
18"	5130/46#	7250/92#	13480/211#	5040/29#	7200/54#	9360/98#
20"	5700/52#	8060/104#	15000/236#	5600/32#	8000/61#	10400/110#
22"	6270/57#	8880/115#	16540/262#	6160/35#	8800/67#	11440/122#
24"	6840/63#	9600/126#	17970/288#	6720/39#	9600/74#	12480/134#
30"	8550/80#	12050/160#	22470/365#	8400/49#	12000/94#	15600/170#
36"	10260/96#	14290/193#	26970/442#	10080/59#	14400/113#	18720/206#
42"	11970/113#	16750/227#	31470/519#	11760/70#	16800/133#	21840/242#
48"	13680/130#	19100/261#	35970/597#	13440/80#	19200/153#	24960/278#
54"	15390/146#	21500/294#	40470/674#	15120/90#	21600/172#	28080/314#
60"	17100/163#	23900/328#	44970/751#	16800/101#	24000/192#	31200/350#

PM C65 24 P M H U S

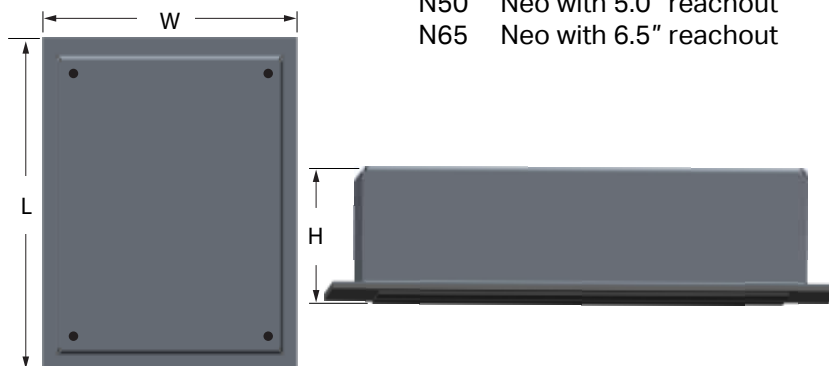
For Part 2 of the Model Number, enter one of these Magnet codes:

- C30 Ceramic with 3.0" reachout
- C45 Ceramic with 4.5" reachout
- C65 Ceramic with 6.5" reachout
- N35 Neo with 3.5" reachout
- N50 Neo with 5.0" reachout
- N65 Neo with 6.5" reachout

PM C65 24 P M H U S

For Part 3 of the Model Number, enter the Plate Magnet width you want:

Enter a two-digit number within the 08- to 60-inch range.



Model	Width (W)	Length (L)	Height (H)
PMC30	*	10"	1-13/16"
PMC45	*	12"	2-15/16"
PMC65	*	18"	4-3/16"
PMN35	*	7-1/2"	1-5/16"
PMN50	*	10"	1-11/16"
PMN65	*	13"	2-3/16"

* Width is chosen by the customer.

Step 4:

Refer to face style illustrations A, B, and C above. If you plan to select the Manual Self-Cleaning Plate Magnet, choose tapered step or flat face. Otherwise, choose any of the three that will work best for you.

PM C65 24 **P** M H U S

For Part 4 of the Model Number, enter your Face Style choice:

F = Flat Face **P** = Pole Face **T** = Tapered Step Face

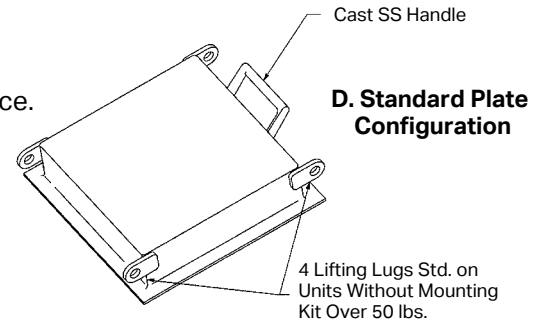
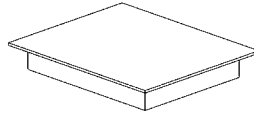
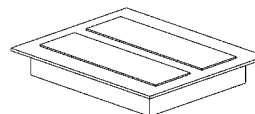


Plate Magnet Face Styles

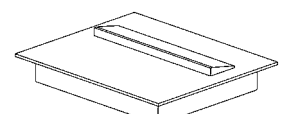
Plate Magnets have stainless steel exteriors and come in three face styles and six magnetic strengths to cover a wide range of applications. All magnetic loads have been designed to deliver up to three times the surface holding force while still maintaining the same powerful reach-out. Faces of pole and tapered step models are constructed of 410/416 magnetic stainless steel and especially well suited to holding captured tramp and fines securely in place. Self-cleaning units are available in tapered step and flat face styles.



A. Flat Face Model is especially recommended for maintaining a sanitary environment. For low-density product applications and inverted installations.



B. Pole Face Model features two exposed pole plates to capture and hold contaminants. For low-density product applications.



C. Tapered Step Face Model is specifically designed to hold ferrous debris against its solid tapered step to prevent wash-off of tramp iron and fines even when product flow is rapid. For high-density product applications.

Step 5:

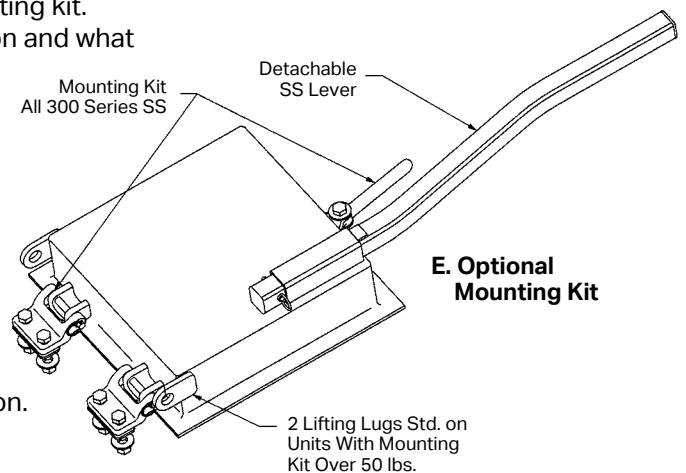
The next step is to decide whether or not you want the mounting kit. Illustrations D and E at right show standard plate configuration and what comes with the optional mounting kit.

PM C65 24 **P** **M** H U S

For Part 5 of the Model Number, enter your decision about the Mounting Kit.

X = No Mounting Kit

M = Mounting Kit with hinges, latch, and hardware



E. Optional Mounting Kit

Step 6:

Refer again to the mounting kit and handle illustrations and table of Recommended Accessories. Then make your selection.

PM C65 24 **P** **M** **H** U S

For Part 6 of the Model Number, enter your Handle choice.

X = No handle, lever, or standard lifting lugs

N = Standard lifting lugs – but no handle or lever

H = Cast stainless steel handle

L = Removable stainless steel lever

Step 7:

Choose clean upgrade Then make your selection.

PM C65 24 **P** **M** **H** **U** S

For Part 7 of the Model Number, enter your Clean Upgrade choice.

U = Utility Grade **U** = Sanitary Grade

F = Food Grade

Recommended Accessories

Weight Range	With Hinge			Self-Cleaning			Std Lifting Lug Qty	
	Handle	Lever	Mech. Assist	Handle	Lever	Mech. Assist	With Hinge and Self-Cleaning	Without Hinge
0-50 lbs.	X			X	X		0	0
50-100 lbs.	X	X			X	X	2	4
100-200 lbs.		X	X			X	2	4
Over 200 lbs.			X			X	4	4

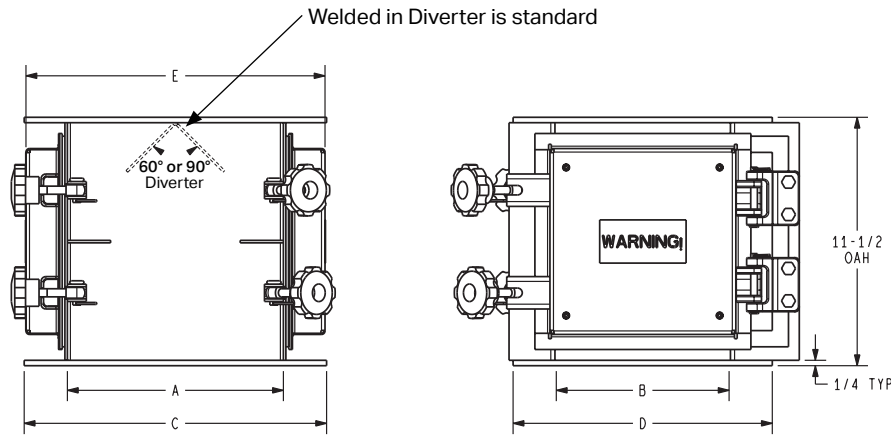
Step 8:

Choose self-cleaning upgrade Then make your selection.

PM C65 24 **P** **M** **H** **U** **S**

S = Self-Cleaning if desired

Plate Housing Magnet



Dimensions and Openings for Standard Models (in inches)

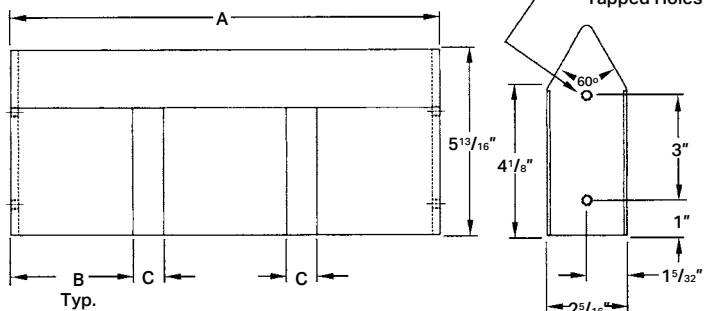
MODEL NO.	SPOUT		OPEN AREA 90° Diverter	A	B	C	D	E
	SQUARE SPOUT Approximate Equivalent	ROUND SPOUT Approximate Equivalent						
PHMS-6-CR	6	7	40	8	8	12	12	13 $\frac{3}{4}$
PHMS-6-NE	6	7	40	8	8	12	12	11 $\frac{3}{8}$
PHMS-8-CR	6	7	40	10	8	14	12	15 $\frac{3}{4}$
PHMS-8-NE	6	7	40	10	8	14	12	13 $\frac{3}{8}$
PHMS-10-CR	7	8	50	10	10	14	14	15 $\frac{3}{4}$
PHMS-10-NE	7	8	50	10	10	14	14	13 $\frac{3}{8}$
PHMS-14-CR	8	10	70	10	14	14	18	15 $\frac{3}{4}$
PHMS-14-NE	8	10	70	10	14	14	18	13
PHMS-20-CR	10	11	100	10	20	14	24	15 $\frac{3}{4}$
PHMS-20-NE	10	11	100	10	20	14	24	13 $\frac{3}{8}$
PHMS-24-CR	11	12	120	10	24	14	28	15 $\frac{3}{4}$
PHMS-24-NE	11	12	120	10	24	14	28	13 $\frac{3}{8}$
PHMS-32-CR	13	14	160	10	32	14	36	15 $\frac{3}{4}$
PHMS-32-NE	13	14	160	10	32	14	36	13 $\frac{3}{8}$

* Removable Diverter available on request.
Pneumatic Self-Cleaning options are available

Wedge Magnet

Choose an accessible location in your spouting, near the final discharge area or ahead of a pellet mill. For the correct size, measure the width of your chute at the exact position where you intend to mount the magnet. Magnet height of 5 ¹³/₁₆" and a maximum width of 2 ⁵/₁₆" do not vary. Installation is easy. Position the magnet to facilitate inspection and manual cleaning. Mark the locations of the ⁵/₁₆" tapped holes in the magnet's end plates. Then drill four holes in the sides of the chute to accommodate four mounting bolts.

Part Number	No. of Poles	A	B	C
WM-10	2	10	4.500	1.000
WM-11	2	11	4.625	1.750
WM-12	3	12	3.500	0.750
WM-13	3	13	3.688	0.969
WM-14	3	14	4.000	1.000



Pneumatic Self-Cleaning Plate Housing Magnet

PHMS PSC Specifications:

General Materials:

- 304 stainless steel
- Optional 316 stainless steel available upon request

Magnetic Materials:

- Neodymium NdFeB (rare earth) magnetic materials are standard

Construction:

- All seams fully welded and finished to BMC Food Grade Spec. 200 is standard
- 1/4" thick x 2" wide pre-drilled top and bottom product flow flanges are standard
- 1/4" thick x 1" wide pre-drilled tramp discharge chute flange are standard

Contaminant Removal:

- All sizes of ferrous metals including fines, 400 series stainless steel, and work hardened stainless steel.

Cleaning Methods:

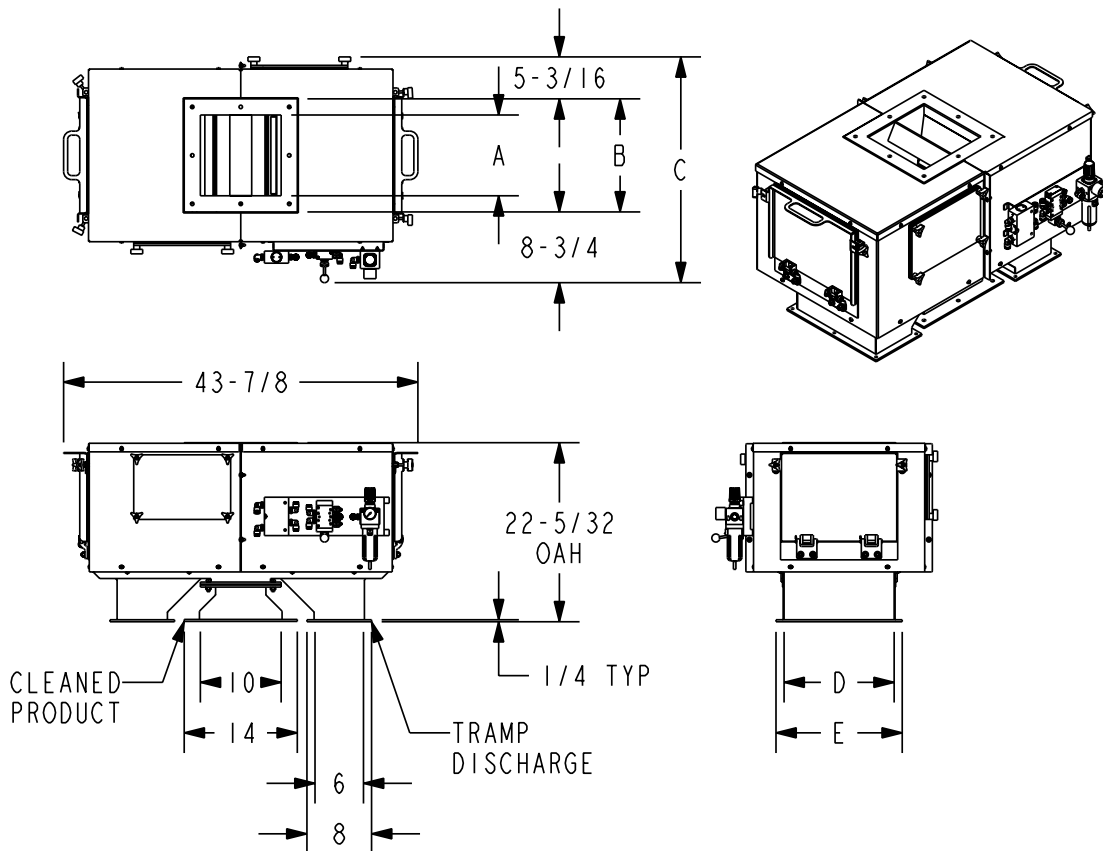
- Pneumatic self cleaning is standard.
- Hand lever valve is standard with filter regulator, gauge and pilot operated dual check valve.

Options:

- Top and bottom bolt on adapters and transitions.
- Push button and automatic controls.
- Other electrical options available upon request.
- Utility and food grade finishes available



Dimensions and Openings for Standard Models (in inches)						
MODEL NO.	OPEN AREA	A	B	C	D	E
PHMS-PSC-10	60	10	14	27-15/16	13-5/8	15-5/8
PHMS-PSC-14	84	14	18	31-15/16	17-5/8	19-5/8
PHMS-PSC-20	120	20	24	37-15/16	23-5/8	25-5/8
PHMS-PSC-24	144	24	28	41-15/16	27-5/8	29-5/8

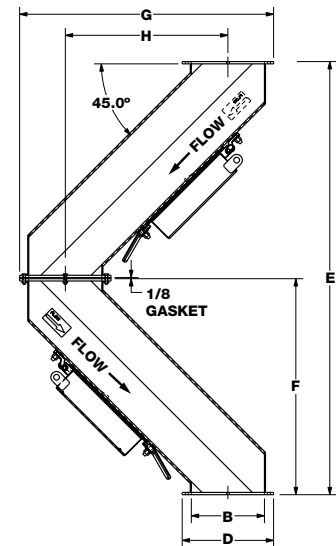


Hump Magnets

Designed for installation in enclosed flow lines on processing equipment. The angled shape directs the product flow into the magnetic field, helps prevent build-up and bridging, and also breaks up clumps of product for increased protection against entrapped ferrous debris.



Standard Hump Magnet



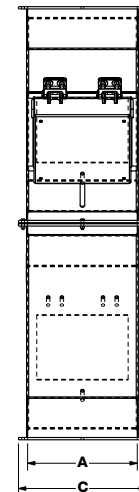
Standard and Half-Hump Magnets

Dimensions in inches.

Spout Size	Model No.	Plate Magnet Model	Opening Width A	Opening Depth B	Flange Width C	Flange Depth D	Full-Hump Standard Models E	Half-Hump Standard Models F	Depth G	Center-to-Center H
4	*HMT-306	300	6	7	8	9	42 7/32	21 1/16	24 5/8	15 5/8
6	*HMT-308	300	8	7	10	9	42 7/32	21 1/16	24 5/8	15 5/8
8	*HMT-310	300	10	7	12	9	42 7/32	21 1/16	24 5/8	15 5/8
10	*HMT-312	300	12	7	14	9	42 7/32	21 1/16	24 5/8	15 5/8
12	*HMT-318	300	18	7	20	9	42 7/32	21 1/16	24 5/8	15 5/8
14	*HMT-424	450	24	8	26	10	47 13/32	23 5/8	27 25/32	17 25/32
16	*HMT-430	450	30	8	32	10	47 13/32	23 5/8	27 25/32	17 25/32
18	*HMT-436	450	36	8	38	10	47 13/32	23 5/8	27 25/32	17 25/32
20	*HMT-442	450	42	8	44	10	47 13/32	23 5/8	27 25/32	17 25/32
24	*HMT-548	650	48	10	50	12	56 1/32	27 15/16	33 9/32	21 9/32
4	HNT-306	350	6	7	8	9	38 11/16	19 9/32	22 27/32	13 27/32
6	HNT-308	350	8	7	10	9	38 11/16	19 9/32	22 27/32	13 27/32
8	HNT-310	350	10	7	12	9	38 11/16	19 9/32	22 27/32	13 27/32
10	HNT-312	350	12	7	14	9	38 11/16	19 9/32	22 27/32	13 27/32
12	HNT-318	350	18	7	20	9	38 11/16	19 9/32	22 27/32	13 27/32
14	HNT-524	500	24	8	26	10	47 13/32	47 13/32	27 25/32	17 25/32
16	HNT-530	500	30	8	32	10	47 13/32	47 13/32	27 25/32	17 25/32
18	HNT-536	500	36	8	38	10	47 13/32	47 13/32	27 25/32	17 25/32
20	HNT-542	500	42	8	44	10	47 13/32	47 13/32	27 25/32	17 25/32
24	HNT-548	650	48	10	50	12	56 1/32	56 1/32	33 9/32	21 9/32

Specifications are subject to change without notice.

* When specifying stainless steel with ceramic loads change designation from HMT to HST



Pneumatic Hump and Half-Hump Magnets

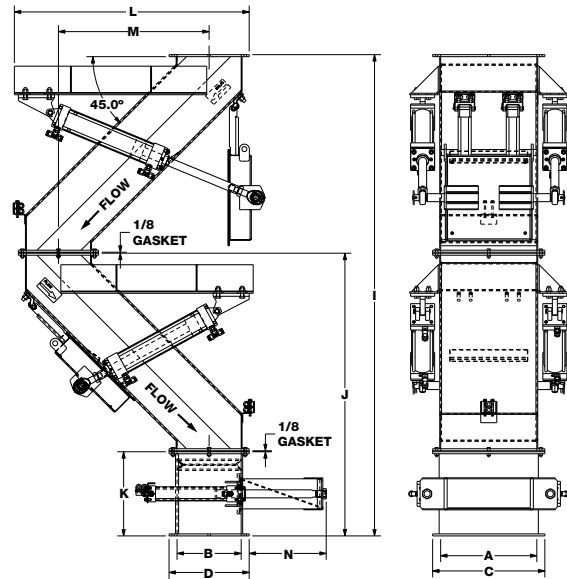
Dimensions in inches.

Spout Size	Plate Magnet Model	Full Hump Height I	Half Hump Height J	Height Tramp K	Depth L	Center-to-Center M	Dump Chute N	
4	*HMT-306-PSC	300	53 9/16	32 1/32	10 1/2	25 19/32	15 13/32	8 5/8
6	*HMT-308-PSC	300	53 9/16	32 1/32	10 1/2	25 19/32	15 13/32	8 5/8
8	*HMT-310-PSC	300	53 9/16	32 1/32	10 1/2	25 19/32	15 13/32	8 5/8
10	*HMT-312-PSC	300	53 9/16	32 1/32	10 1/2	25 19/32	15 13/32	8 5/8
12	*HMT-318-PSC	300	53 9/16	32 1/32	10 1/2	25 19/32	15 13/32	8 5/8
14	*HMT-424-PSC	450	60 1/16	35 9/32	10 1/2	29 5/16	18 13/16	9 5/8
16	*HMT-430-PSC	450	60 1/16	35 9/32	10 1/2	29 5/16	18 13/16	9 5/8
18	*HMT-436-PSC	450	60 1/16	35 9/32	10 1/2	29 5/16	18 13/16	9 5/8
20	*HMT-442-PSC	450	60 1/16	35 9/32	10 1/2	29 5/16	18 13/16	9 5/8
24	*HMT-548-PSC	650	75 27/32	43 3/16	10 1/2	37	25 7/8	11 5/8
4	HNT-306-PSC	350	51 7/16	30 31/32	10 1/2	25 29/32	14 29/32	8 5/8
6	HNT-308-PSC	350	51 7/16	30 31/32	10 1/2	25 29/32	14 29/32	8 5/8
8	HNT-310-PSC	350	51 7/16	30 31/32	10 1/2	25 29/32	14 29/32	8 5/8
10	HNT-312-PSC	350	51 7/16	30 31/32	10 1/2	25 29/32	14 29/32	8 5/8
12	HNT-318-PSC	350	51 7/16	30 31/32	10 1/2	25 29/32	14 29/32	8 5/8
14	HNT-524-PSC	500	58 5/8	34 9/16	10 1/2	29 27/32	18 3/32	9 5/8
16	HNT-530-PSC	500	58 5/8	34 9/16	10 1/2	29 27/32	18 3/32	9 5/8
18	HNT-536-PSC	500	58 5/8	34 9/16	10 1/2	29 27/32	18 3/32	9 5/8
20	HNT-542-PSC	500	58 5/8	34 9/16	10 1/2	29 27/32	18 3/32	9 5/8
24	HNT-548-PSC	650	68 25/32	39 5/8	10 1/2	35 27/32	22 11/32	11 5/8

Specifications are subject to change without notice.

* When specifying stainless steel with ceramic loads change designation from HMT to HST

Pneumatic Self-Cleaning Hump Magnet



Use dimensions A-H from the top chart

Drum Separator

Drum Separators with Housings

Dimensions in inches. Capacities in cubic feet per hour.

Operate at 45 rpm

Model No.	Diameter	Length	*Capacity	A	B	C	D	E	F	HP
DSH 1212	12	12	1000	27	14 1/2	22	6	11	26	1/3
DSH 1218	12	18	1500	27	20 1/2	22	6	17	26	1/3
DSH 1224	12	24	2000	27	26 1/2	22	6	23	26	1/3
DSH 1230	12	30	2500	27	32 1/2	22	6	29	26	1/2
DSH 1236	12	36	3000	27	38 1/2	22	6	35	26	1/2

Operate at 35 rpm

Model No.	Diameter	Length	Capacity	A	B	C	D	E	F	HP
DSH 1812	18	12	1600	33	14 1/2	28	6	11	32	1/2
DSH 1818	18	18	2400	33	20 1/2	28	6	17	32	1/2
DSH 1824	18	24	3200	33	26 1/2	28	6	23	32	1/2
DSH 1830	18	30	4000	33	32 1/2	28	6	29	32	3/4
DSH 1836	18	36	4800	33	38 1/2	28	6	35	32	3/4
DSH 1842	18	42	5600	33	44 1/2	28	6	41	32	3/4
DSH 1848	18	48	6400	33	50 1/2	28	6	47	32	3/4

Operate at 30 rpm

Model No.	Diameter	Length	Capacity	A	B	C	D	E	F	HP
DSH 2418	24	18	3300	40	22	38	8	17	32	3/4
DSH 2424	24	24	4400	40	28	38	8	23	32	3/4
DSH 2430	24	30	5500	40	34	38	8	29	32	1
DSH 2436	24	36	6600	40	40	38	8	35	32	1
DSH 2442	24	42	7700	40	46	38	8	41	32	1
DSH 2448	24	48	8800	40	52	38	8	47	32	1
DSH 2454	24	54	10000	40	58	38	8	53	32	1

* Maximum capacity Call for bulk density flow rates

Drum Separators without Housings

Dimensions in inches. Capacities in cubic feet per hour.

Operate at 45 rpm

Model No.	Diameter	Length	*Capacity	G	H	I	J	K	L	HP
DS 1212	12	12	1000	13 1/8	5	7	25 1/8	1 1/8	14	1/3
DS 1218	12	18	1500	19 1/8	5	7	31 1/8	1 1/8	14	1/3
DS 1224	12	24	2000	25 1/8	5	7	37 1/8	1 1/8	14	1/3
DS 1230	12	30	2500	31 1/8	5	7	43 1/8	1 1/8	14	1/2
DS 1236	12	36	3000	37 1/8	5	7	49 1/8	1 1/8	14	1/2

Operate at 35 rpm

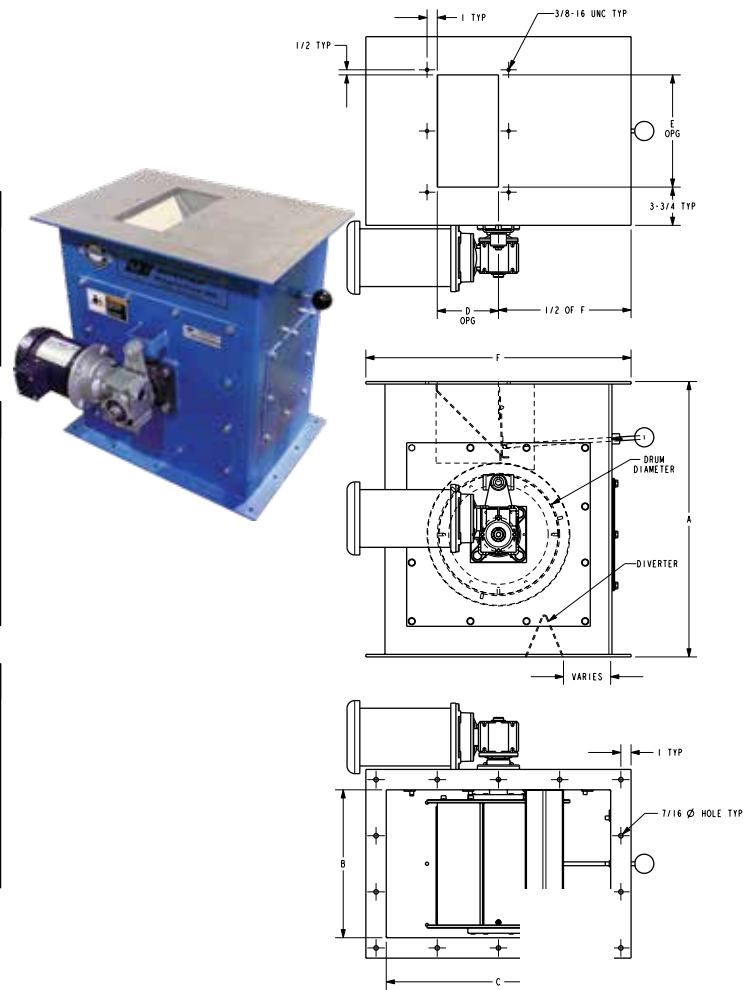
Model No.	Diameter	Length	*Capacity	G	H	I	J	K	L	HP
DS 1812	18	12	1600	14 1/4	6	8	28 1/4	2 1/16	20	1/2
DS 1818	18	18	2400	20 1/4	6	8	34 1/4	2 1/16	20	1/2
DS 1824	18	24	3200	26 1/4	6	8	40 1/4	2 1/16	20	1/2
DS 1830	18	30	4000	32 1/4	6	8	46 1/4	2 1/16	20	3/4
DS 1836	18	36	4800	38 1/4	6	8	52 1/4	2 1/16	20	3/4
DS 1842	18	42	5600	44 1/4	6	8	58 1/4	2 1/16	20	3/4
DS 1848	18	48	6400	50 1/4	6	8	64 1/4	2 1/16	20	3/4

Operate at 30 rpm

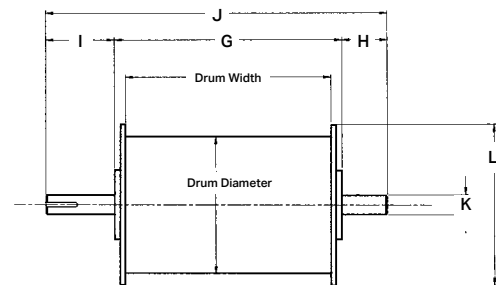
Model No.	Diameter	Length	*Capacity	G	H	I	J	K	L	HP
DS 2418	24	18	3300	14 1/4	8	10	32 1/4	2 15/16	26	3/4
DS 2424	24	24	4400	20 1/4	8	10	38 1/4	2 15/16	26	3/4
DS 2430	24	30	5500	26 1/4	8	10	44 1/4	2 15/16	26	1
DS 2436	24	36	6600	32 1/4	8	10	50 1/4	2 15/16	26	1
DS 2442	24	42	7700	38 1/4	8	10	56 1/4	2 15/16	26	1
DS 2448	24	48	8800	44 1/4	8	10	62 1/4	2 15/16	26	1
DS 2454	24	54	10000	50 1/4	8	10	68 1/4	2 15/16	26	1

* Maximum capacity Call for bulk density flow rates

Specifications are subject to change without notice.



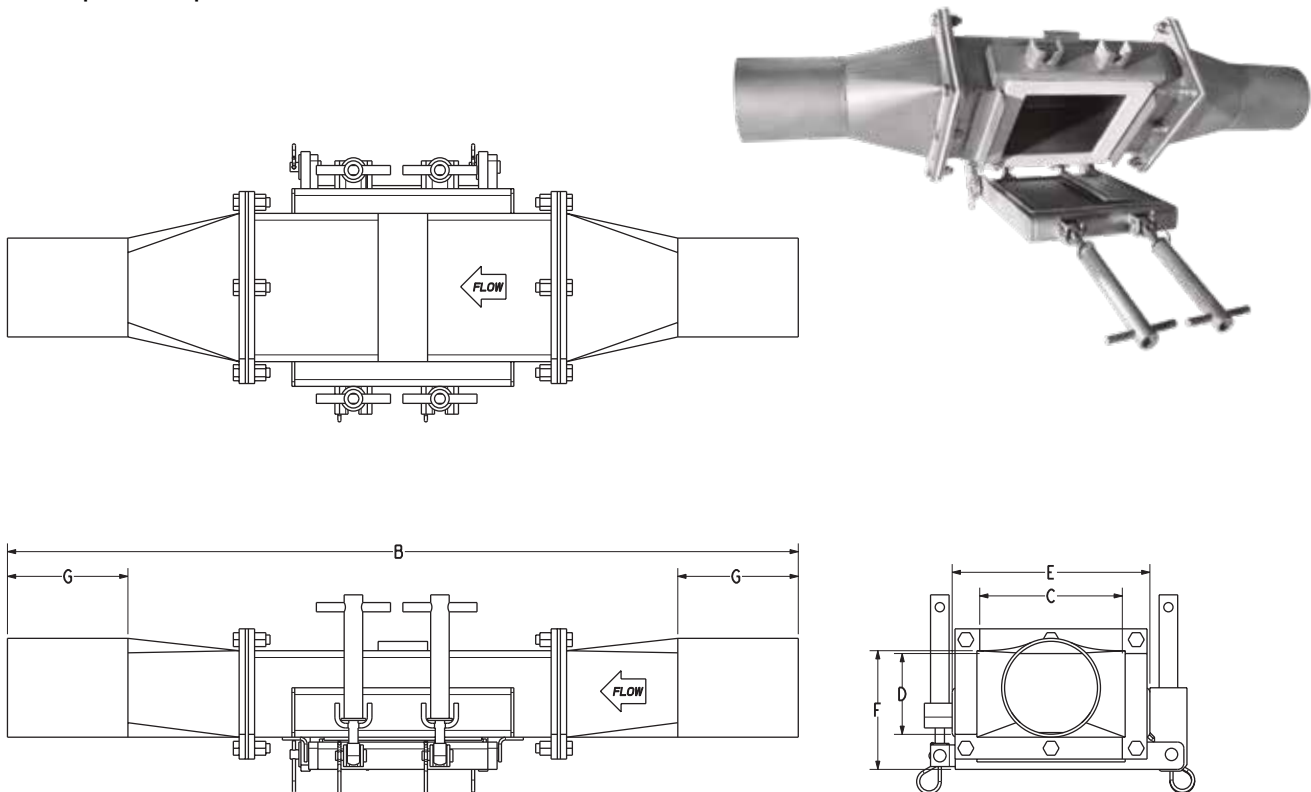
Available loads: Ceramic, Neodymium and Neodymium-HD



Pneumatic In-Line Magnet

Model No.	A*	B	C	D	E	F
PIM-2-CR	2	36	6	3 1/2	8	4 7/8
PIM-2-NE	2	32	6	3 1/2	8	4 7/8
PIM-3-CR	3	36	6	3 1/2	8	4 7/8
PIM-3-NE	3	32	6	3 1/2	8	4 7/8
PIM-4-CR	4	36	6	3 1/2	8	4 7/8
PIM-4-NE	4	32	6	3 1/2	8	4 7/8
PIM-5-CR	5	41	8	4	10	5 1/2
PIM-5-NE	5	38	8	4	10	4 7/8
PIM-6-CR	6	55	12	4	14	7
PIM-6-NE	6	52	12	4	14	6 3/8
PIM-8-CR	8	61	17	5	19	7
PIM-8-NE	8	53	17	5	19	6 3/8
PIM-10-CR	10	65	20	6 1/2	22	7
PIM-10-NE	10	57	20	6 1/2	22	7

Available in Food & Utility grade finishes.
 Dimensions in inches. Specifications are subject to change without notice.
 * Please specify tubing or pipe size when ordering.
 Tapered Step standard.



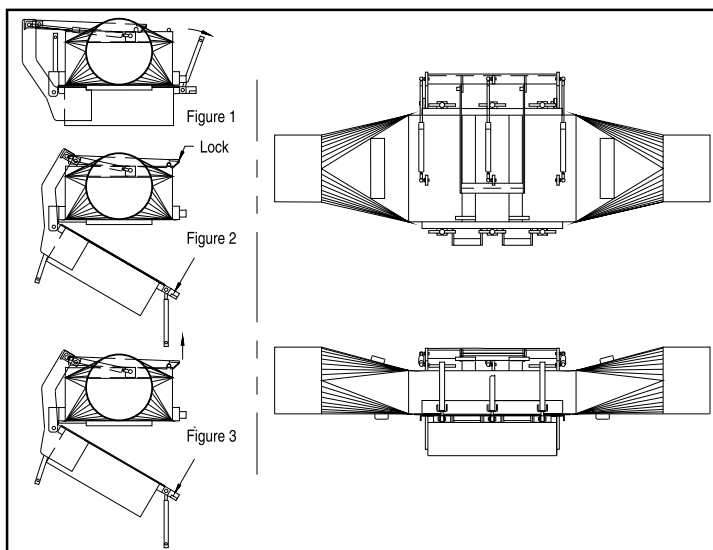
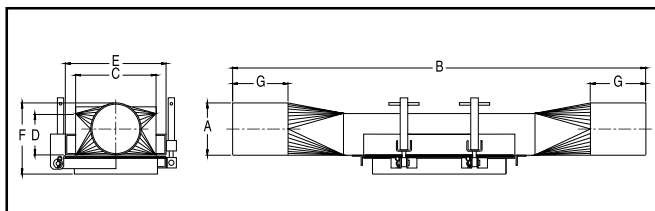
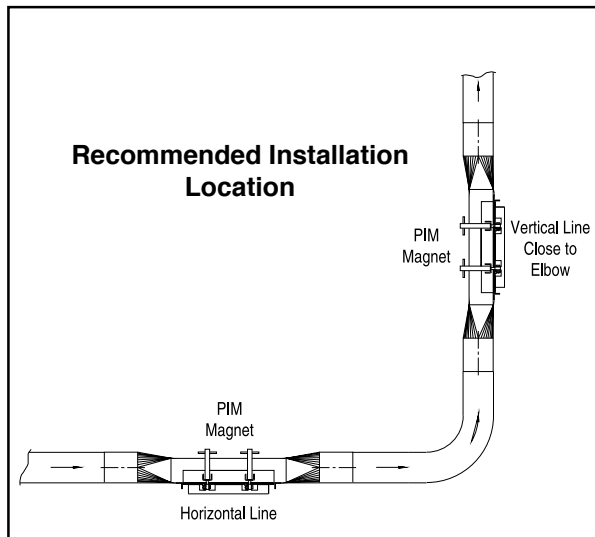
Specifications are subject to change without notice.

Pneumatic In-Line Magnets

Bunting Pneumatic In-Line Magnets are designed for use in dilute-phase pneumatic conveyor systems. Because it uses a powerful plate magnet, product flow is basically unobstructed. It can be installed easily with factory-supplied compression couplings, available upon request.

For best magnetic separation, the Pneumatic In-Line Magnet should be installed in horizontal runs with the plate magnet down. This installation position takes advantage of the natural material stratification that occurs in a horizontal line due to gravity. Heavier objects, including tramp metal, tend to settle and ride in the bottom portion of the line at a lower velocity than the rest of the material. This, combined with the unique housing design, directs material flow to the plate magnet's face. The Pneumatic In-Line Magnet can also be installed in a vertical position directly after an elbow with the magnet located on the outside of the sweep.

The plate magnet creates a strong magnetic field across the entire cross section of the housing for superior separation performance. To clean the plate magnet, simply loosen the clamping handles and swing the magnet open. Then wipe any tramp metal off the plate magnet. **Eight- and ten-inch models are available with gas cylinders to assist in opening and closing the substantial plate magnets.** Self-Cleaning Pneumatic In-Line magnets are available.



SPECIFICATIONS

General material: 11 Ga. 302/304 stainless steel with standard size tube ends.

Magnet material: High-density Ceramic (LR) permanent magnetic material. Rare Earth (NE) models available.

Magnet design: Standard plate magnet with 400 series stainless steel exposed pole face. Other face styles available.

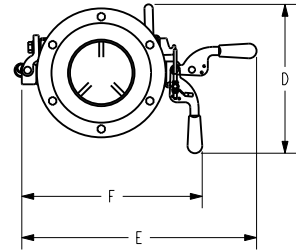
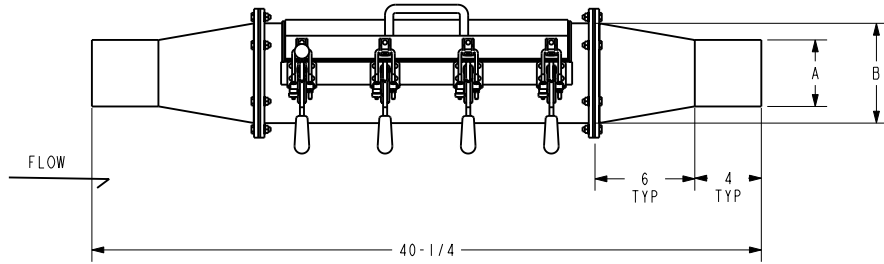
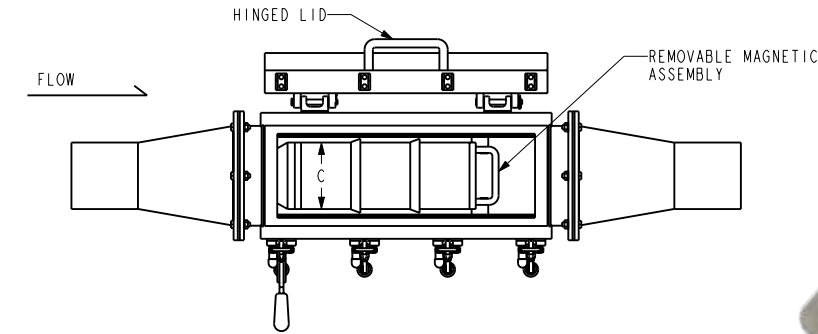
Construction: Housing is seam welded into an integral unit. Magnet furnished with hinge, latches, and silicone gasket. Compression couplings can be ordered for installation. Special adapters available upon request.

Method of cleaning: Manual, from outside of housing, utilizing hinged swing-away magnet. Self cleaning models available.

Sizes: Available in 2" through 12" line sizes. Special sizes available upon request.

Center-Flow Magnet - Bolt on Flanges

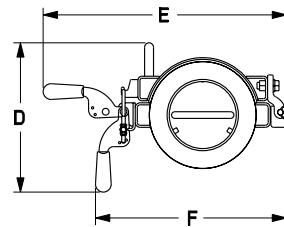
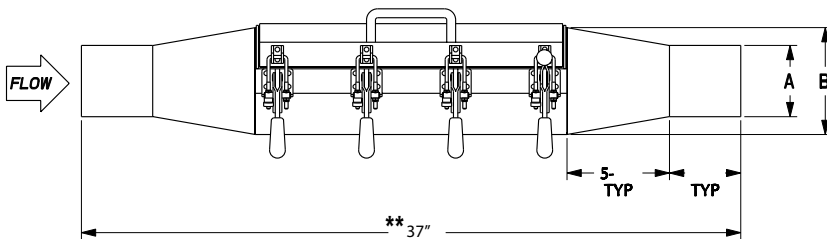
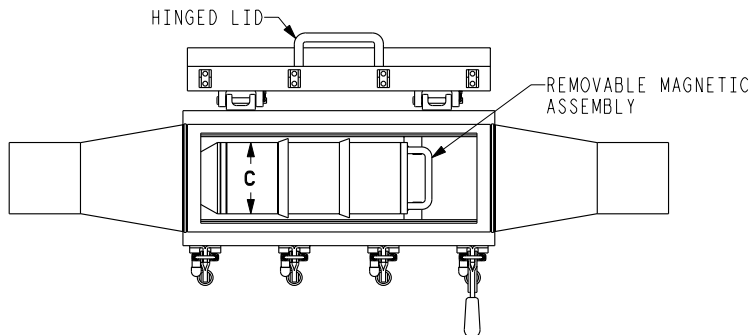
Sizes 2" - 8" available with bolt on flanges.



Specifications are subject to change without notice.

Center-Flow Magnet - Standard Flanges

Sizes 8" and larger available with welded on flanges.



Model No.	A	B	C	D	E	F
+CFM-3-NE	3	6	4	8 5/16	14 1/8	10 3/4
+CFM-4-NE	4	6	4	8 5/16	14 1/8	10 3/4
**CFM-5-NE	5	7	4	9 3/8	14 1/8	11 7/4
**CFM-6-NE	6	8	5	10 1/2	14 1/8	13 1/4

* Please specify tubing or pipe size when ordering

* Other magnetic loads available

* Food Grade Construction Available - Add an "F" at the end of the model number if this is for Food Grade.

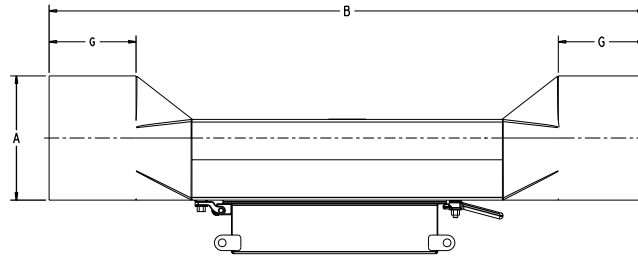
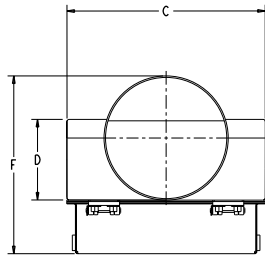
* Rated for up to 15 PSI

+ 2" - 8" sizes are manufactured with bolt on flanges. 8" and over sizes are manufactured with welded on flanges.

** CFM-5-NE and CFM-6-NE have a length of 37"

Gravity In-Line Magnet

Model No.	A	B	C	D	F	G
GIM-5	5	33	8	4	7 ¹³ / ₁₆	5 1/2
GIM-5-NE	5	29	8	4	6 ⁷ / ₁₆	5 1/2
GIM-6	6	38	12	4	7 ¹³ / ₁₆	5 1/2
GIM-6-NE	6	34	12	4	6 ⁷ / ₁₆	5 1/2
GIM-8	8	41	14	5	7 ¹³ / ₁₆	5 1/2
GIM-8-NE	8	38	14	5	6 ⁷ / ₁₆	5 1/2
GIM-10	10	48	16	6 1/2	7 ¹³ / ₁₆	5 1/2
GIM-10-NE	10	40	16	6 1/2	6 ⁷ / ₁₆	5 1/2
GIM-12	12	51	22	6 1/2	7 ¹³ / ₁₆	5 1/2
GIM-12-NE	12	43	22	6 1/2	6 ⁷ / ₁₆	5 1/2



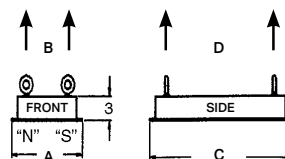
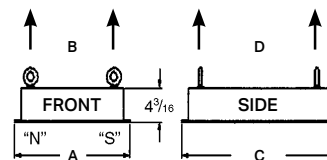
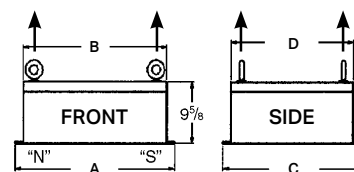
SPECIFICATIONS

General material: 13 Ga. 302/304 stainless steel with standard size tube ends.
Magnet material: High-density Ceramic (CR) permanent magnetic material. Rare Earth (NE) models available.
Magnet design: Standard plate magnet with 400 series stainless steel exposed pole face. Other face styles available.
Construction: Housing is seam welded into an integral unit. Magnet furnished with hinge, latches, and silicone gasket. Compression couplings for installation and special adapters are available upon request.
Method of cleaning: Manual, from outside of housing, utilizing hinged swing-away magnet. Self cleaning models available (SC).
Sizes: Available in 5" through 12" line sizes. Special sizes available upon request.

Suspended Plate Magnet

The sizes shown below are for troughed belts. For flat belt applications, match dimension A to the belt width. Dimensions in inches. For Food Grade, add an "F" at the end of the model number.

	SIDE VIEW		FRONT VIEW				Height
	Magnetic Reachout	A	B	C	D		
950							
PMS 24	10	18	14 1/4	27 3/4	21 1/4	9 5/8	
PMS 30	10	24	20 1/4	27 3/4	21 1/4	9 5/8	
PMS 36	10	26 1/8	28 7/8	27 3/4	24 31/32	9 5/8	
PMS 42	10	36	32 1/4	27 3/4	21 1/4	9 5/8	
PMS 48	10	42	38 1/4	27 3/4	21 1/4	9 5/8	
650							
PMSC6518F	6.5	18	14 1/4	18	16 5/8	4 3/16	
PMSC6524F	6.5	24	20 1/4	18	16 5/8	4 3/16	
PMSC6530F	6.5	30	26 1/4	18	16 5/8	4 3/16	
PMSC6536F	6.5	36	32 1/4	18	16 5/8	4 3/16	
PMSC6542F	6.5	42	38 1/4	18	16 5/8	4 3/16	
450							
PMSC4512F	4.5	12	8 1/4	12	10 5/8	3	
PMSC4518F	4.5	18	14 1/4	12	10 5/8	3	
PMSC4524F	4.5	24	20 1/4	12	10 5/8	3	
PMSC4530F	4.5	30	26 1/4	12	10 5/8	3	
PMSC4536F	4.5	36	32 1/4	12	10 5/8	3	



SPECIFICATIONS

General material: All mild steel with structural steel support frame. Heavy 302/304 stainless steel magnet face.
Magnet material: High-density Ceramic permanent magnet with 1/2 pound of pull at 9". Magnet design: Massive bipolar, deep-penetrating magnetic field.
Construction: Magnet welded into integral unit. Support frame sub-assembly weldments. Bolt-together field installation.
Contaminant removal: Tramp iron such as nuts, bolts, wire, chain, hammers, crowbars, etc. from free-flowing, granular, clumping, or bridging-type materials.
Method of cleaning: Manual, over conveyor belt or from side of belt, with optional sliding face-plate feature for easy cleaning. Styles: Can be furnished with or without support frame.
Sizes: Available in 5 sizes to fit 24" through 48" belt widths. Frame fabricated to fit existing equipment per customer specifications.
Uses: To protect particulate handling equipment from damage and hazards of tramp iron. Usually mounted directly over conveyor belts and as close to product

Specifications are subject to change without notice.

Magnetic Liquid Traps

Cartridge-Style Liquid Traps are the right choice for use with nonfibrous fluids that do not clog or contain solids larger than 0.5" 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. If needed please add "F" for Food or "S" for Sanitary grade to end of model number.

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 Gallons Per Minute for Various Products*

Model No.	Thin Liquids 0-500CP	Light Creams 500-5,000CP	Heavy Pastes 5,000-50,000CP	Semi-Solid Fluids 50,000CP+
MLT-C/CSC-2"	125	95	60	30
MLT-C/CSC-3"	225	170	110	55
MLT-C/CSC-4"	310	230	150	75
MLT-SP-2"	50	40	25	15
MLT-SP-3"	90	65	45	25
MLT-DP-2"	100	75	50	25
MLT-DP-3"-4"	180	130	90	50

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

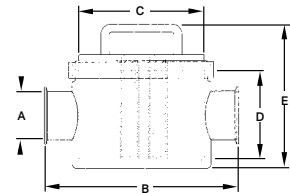
Magnets Matched to Your Operating Temperatures

The standard magnet for Cartridge-Style MLT's is the Neodymium High-Intensity load. This magnet is intended for high-temperature processing or where clean-in-place (CIP) systems might expose traps to elevated temperatures. Our NHI heat-resistant load is standard. This Neodymium High-Intensity load is specially designed to operate in temperatures up to 290°F. Liquid Traps are available with an optional water jacket.

Plate-Style Liquid Traps come with N40SH magnets, which can handle temperature environments as high as 290°F.

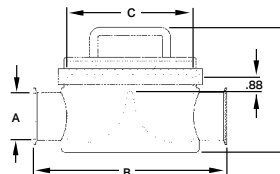
Cartridge Style

Model No.	A	B	C	D	E	F	Max. Press.	Net. Wt.
MLT-C-2	1" 1.5" 2"	9.5	5.19	4.5	7.25	8	250 psi	22 lbs.
MLT-C-3	2.5" 3"	12	7.81	5.5	8.5	10	200 psi	40 lbs.
MLT-C-4	3.5" 4"	12	7.81	7.5	10.5	10	200 psi	48 lbs.



Single Plate Magnet Style

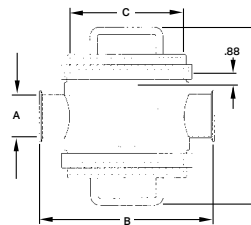
Model No.	A	B	C	E	F	Max. Press.	Net. Wt.
MLT-SP-2	1" 1.5" 2"	9.5	5.19	6.69	8	250 psi	18 lbs.
MLT-SP-3	2.5" 3"	12	7.81	8.12	10	200 psi	40 lbs.



Note: Maximum pressure rating for 70°F. 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.

Dual Plate Magnet Style

Model No.	A	B	C	E	F	Max. Press.	Net. Wt.
MLT-DP-2	1" 1.5" 2"	9.5	5.19	10.0	8	250 psi	24 lbs.
MLT-DP-3	2.5" 3"	12	7.81	12.5	10	200 psi	49 lbs.
MLT-DP-4	3.5" 4"	12	7.81	12.5	10	200 psi	49 lbs.



Specifications are subject to change without notice.

Fitting Option

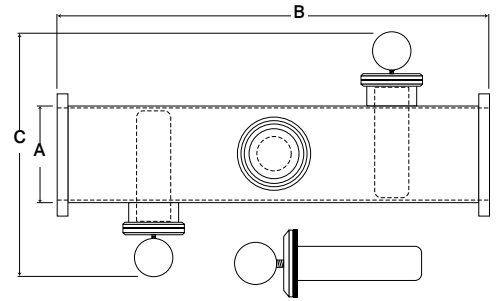
All MLT's are supplied to two fitting clamps as standard equipment. Other fittings can be substituted to match your requirements. Choose from clamp, threaded bevel seat, weld, and pipe fittings in 3/4" to 4" sizes.

Magnetic In-Line Liquid Traps

In-line Liquid Trap

Model No.	A	B	C	Max. Press.
MLT-I-C-3	3 1/2"	12"	7"	200 psi
MLT-I-C-4	4 1/2"	12"	8"	200 psi

Sanitary grade is standard on this model.



Liquid Trap with Water Jacket

Available on all models upon request

Assembled onto existing housings, water Jackets are designed to provide a water space around the sides and the bottom of Bunting's Liquid Traps. (On dual plate units, jackets fit around sides only.) They are ideal for use in heated pipeline systems for products that solidify, such as chocolate or cheese.



Water Jacket Specifications

- Jackets are fabricated of 304 SS.
- Inlet and outlet heating water ports are 3/4" NPT female. The inlet is positioned lower than the outlet to allow incoming liquid to purge air from the cavity.
- Water Jacket assemblies are pressure tested to 150% of their 150 psi rated capacity.
- Optional bottom drain port is available with a 1/2" NPT tapped hole in the center of the bottom plate fitted with a plug.

Metal-Detectable Gaskets

Only Offered by Bunting® • Standard on Food Grade Magnetic Separation Products • FDA Compliant.

Contamination from chipped or cracked gaskets is minimized with the industry's only metal detectable gaskets from Bunting® Magnetics Co. Now, if a piece chips off or the gasket breaks, it is immediately caught by the cartridge or plate. The broken piece can also be seen in any metal detection or x-ray system.

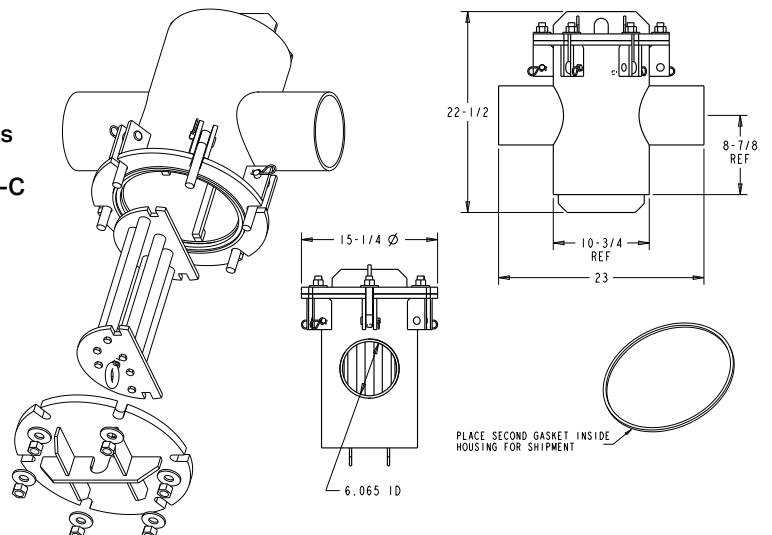


Gaskets - Metal Detectable

Property	Buna-N	EPDM	*Viton®
Temperature range	-40 to 225°F	-55 to 275°F	-20 to 400°F
Acid resistance	good	good-excellent	good
Alkali resistance	fair-good	good-excellent	poor-good
Petroleum oil resistance	excellent	poor	excellent
Vegetable oil resistance	good	good	excellent

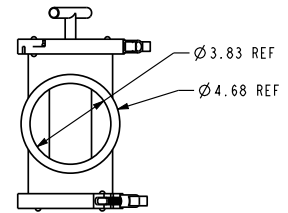
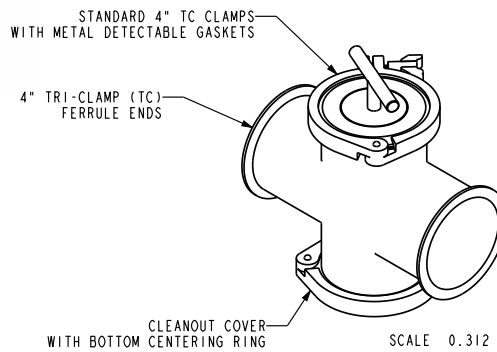
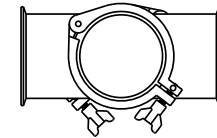
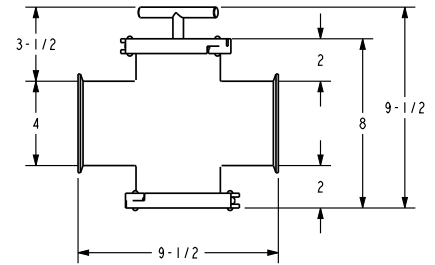
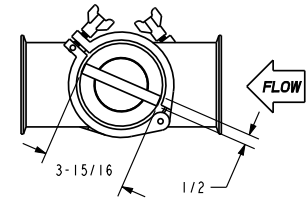
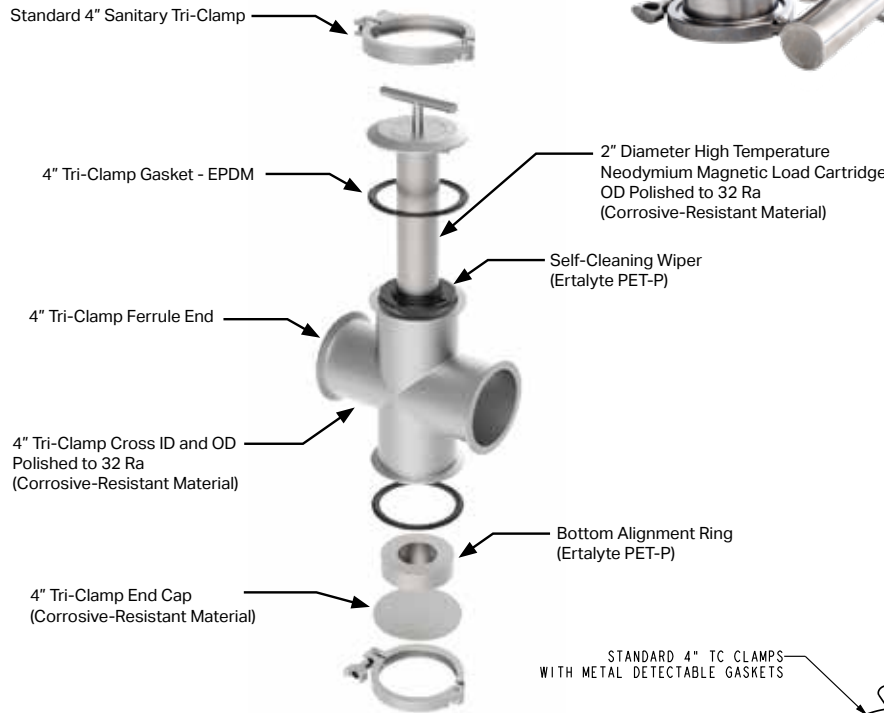
Vertical T-Trap Liquid Trap

T-Trap are designed for larger line sizes from 6" to 10". These are used more for the paper and pulp industry and due to the larger vessels, they have to have the swing bolts on the top to hold the lid on. These can be made to food grade but will not be the highly polished units like the MLT-C units.



CR-Magnetic Liquid Trap

Corrosive-Resistant for Processing of Acidic Foods



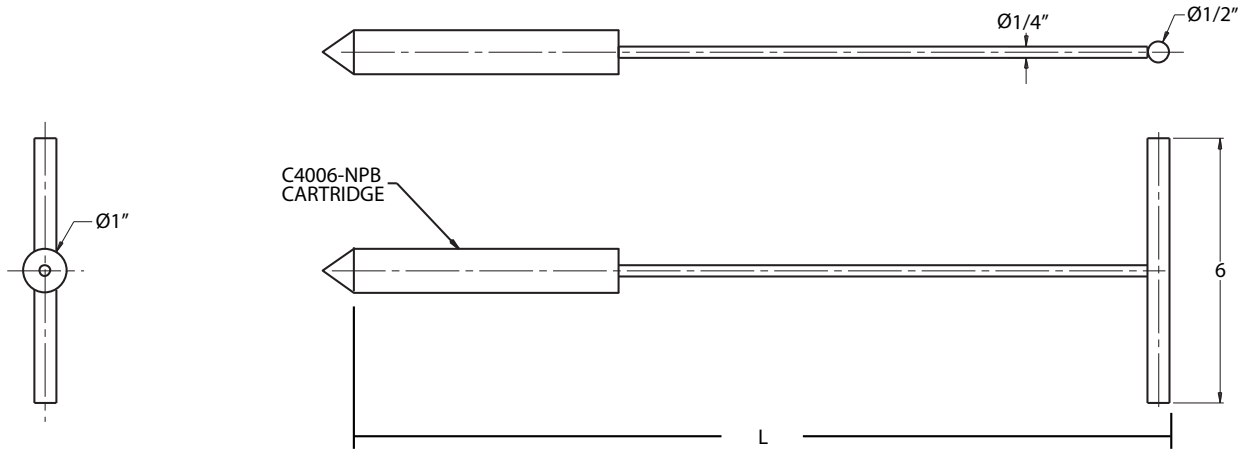
Features:

- Manufactured of Corrosive-Resistant Material.
 - This revolutionary material has a much higher resistance to chloride pitting, crevice corrosion, and stress cracking corrosion.
- Standard Tri-Clamp clamped housing body versus V-band clamp.
 - Standard closing system.
 - Still maintains the same pressure ratings as our standard units.
- 2" diameter magnetic load with 45SH Neodymium magnets.
 - Thicker wall than 1" cartridges to last longer in service.
- Self-Cleaning is offered as standard.
 - Ertalyte PET-P wiper ring, similar to our HFS wipers used to clean magnetic load.
- 4" Tri-Clamp clamps used for both the magnetic load and the bottom of the housing.
 - Quicker cleaning of magnetic cartridge.
 - Standard gaskets are less expensive and less likely to be damaged.
 - Quick bottom of housing opening allows for better cleaning.

Special Cartridge ASM

This magnet tool is used to test detect any ferrous metals in customer product. Put the rod down into a sample of the product and stir up the product with the ASM. Pull out the magnet ASM to see if any ferrous metal material has been attached it.

Available in lengths of 12", 24, and 36". "L"





GLOBAL. MAGNETIC. FORCE.™

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