

# MAGNETIC FERROUS TRAPS



## Permanent magnets for the removal of ferrous metal contamination from liquid lines.



## Typical Applications

- Food
- Paints and inks
- Engineering
- Ceramics
- Paper
- Chemicals

## Benefits

- Preserve product purity by removing small particles of magnetic scale, rust and fine iron contamination
- Protect valuable machinery
- Eliminate downtime

## Features

- Available in Ferrite, Standard and Megastrength Rare Earth magnetic materials
- High quality body construction
- Sanitary models
- Easy clean design available
- Pipe sizes from 50mm
- Water jacketed models
- Only the highest grades of magnetic and body materials are utilised to provide optimum protection for wet separation
- Integral sump in all models to help trap larger non-magnetic items as they settle out into the bottom of the body

## Model 'B' Range

### Standard Design

For 50mm through 100mm pipelines. Available in Ferrite, Standard and Megastrength Rare Earth, the magnetic element fits into the Grade 316 stainless steel body casting in such a way as to ensure that all of the product passing through the trap enters the strongest part of the magnetic field.

The strength and design of the magnetic circuit ensure that any collected contaminants are held to the downstream side of the tubes, preventing the particles from being washed off.

The body contour of the trap tends to spread the material equally round the element, without restricting the flow of the material.

Operating pressures of up to 10 bar (150 p.s.i.) are standard, with heavier duty models available on request. The pressure drop within the body is equivalent to a 90° bend.

All sizes have B.S.P. threaded ends as standard, with flanges or special threads available as extras.



### Easy Clean Design

ERIEZ 'B' Traps are also available with Easy Clean magnetic elements for complete removal of fine iron particles from an outer sleeve, thus speeding up the cleaning process and reducing downtime.

The element stud can be locked to eliminate accidental cleaning.

### Water Jacketed Design

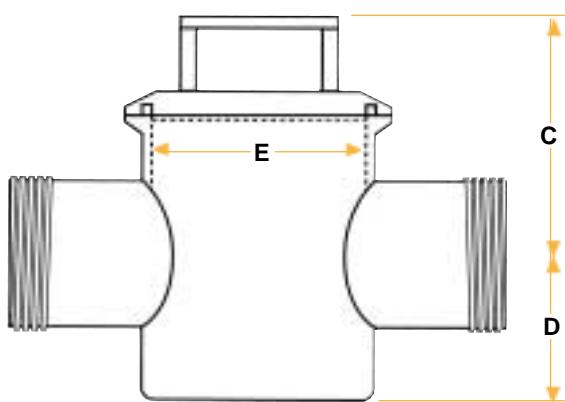
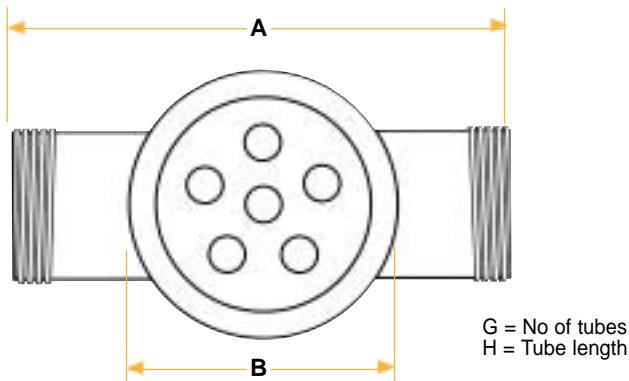
When it is essential that the product is kept heated for it to remain fluid, eg honey or chocolate, a stainless steel (grade 304) water jacket can be constructed around the main body.

The B.S.P. inlet and outlet ensures a constant flow of hot water.

### Specifications

Model	Pipeline Size N.B.	Dimensions (mm)										Capacities(l/s)			Nominal weight (kg)	
		A	B	C	D	E	F	G	H	J	Fluid	Medium	Viscous	Total	Element	
B2	50	279	164	111	68	127	-	5	112	-	0.06-4	0.06-3.3	0.06-2.1	12	5	
B3	75	305	175	148	102	140	-	5	184	-	4-8	3.3-7	2.1-5	15	8	
B4	100	381	200	157	111	165	-	6	201	-	8-10	7-8	5-7	23	15	

Dimensions and capacities are a guide only. Please ask for a certified drawing when ordering.



## Model 'T' Range

For 150mm through 450mm pipelines.

These high capacity units reduce damage and maintenance to filters, pumps and other process machinery handling liquid materials.

Rugged, welded pipe and reinforced plate construction withstand operational pressures of up to 5.3 bar (75 p.s.i.).

The standard body is constructed from mild steel and has flanged ends and a drain plug for removal of entrapped non-magnetic particles.

Guide lugs on the element locate with rods in the body for correct positioning, whilst a non-magnetic area at the base of each tube makes cleaning easier.

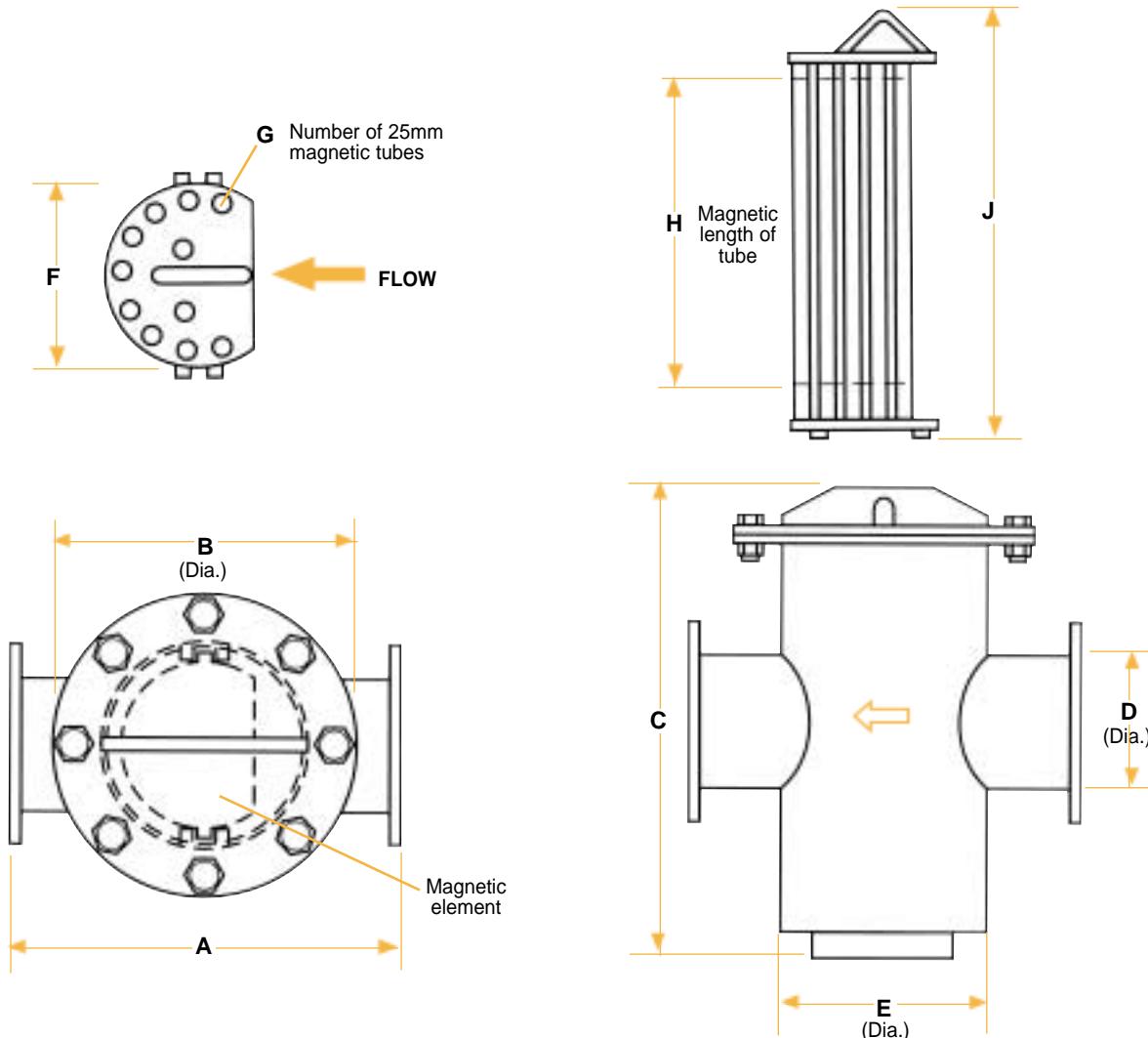
Unlike the Model 'B', which can be installed in any orientation, the 'T' Trap is primarily for upright installations. Check with Eriez engineers for vertical or angled applications.



## Specifications

Model	Pipeline Size N.B.	Dimensions (mm)										Capacities(l/s)			Nominal weight (kg)	
		A	B	C	D	E	F	G	H	J	Fluid	Medium	Viscous	Total	Element	
T6	150	584	406	552	152	273	203	7	292	419	23-45	14-27	9-18	95	18	
T8	200	660	483	749	203	311	267	9	387	578	45-82	27-49	18-33	120	28	
T10	250	762	597	940	254	406	330	11	578	768	82-123	49-74	33-49	200	44	
T12	300	864	635	940	305	457	381	15	578	768	123-142	74-85	49-57	236	59	
T14	350	914	699	1080	356	508	432	15	673	864	142-208	85-126	57-82	330	70	
T16	400	1016	813	1175	406	610	521	17	673	889	208-265	126-158	82-107	449	81	
T18	450	1016	813	1270	457	610	521	17	768	984	265-334	158-202	107-133	476	86	

Dimensions and capacities are a guide only. Please ask for a certified drawing when ordering.



# MAGNETIC FERROUS TRAPS

## Models 'L' and 'L-2-F'

50mm pipelines only.

This model of Trap is again available with both Ferrite and Rare Earth magnetic elements.

The unit was designed to serve as a low-cost, pipeline trap where operating conditions are not too severe.

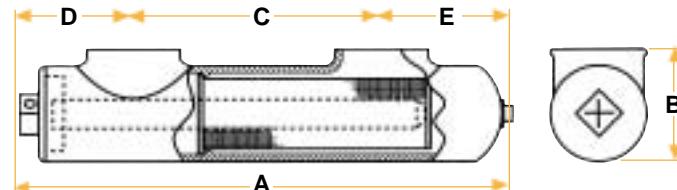
The housing is of non-sanitary cast bronze construction capable of withstanding pressures of up to 10.5 bar (150 p.s.i.).

B.S.P. threaded internal connectors are standard. However, alternatives may be considered on request.

Although the inlet and outlet are designed for 50mm pipelines, standard reducers can be used to adapt it to lines as small as 13mm.

The powerful magnetic circuit is encased in a single magnetic tube, which, in the case of the 'L-2-F' design, can be surrounded with a perforated bronze filter sleeve to assist in capturing non-magnetic fines, lint, etc.

Screens are available with 0.5mm or 0.8mm diameter openings.



## Specifications

Model	Pipeline Size	Dimensions (mm)					Nominal Weight (kg)
		A	B	C	D	E	
L	50	394	95	203	84	106	7
L-2-F	50	394	95	203	84	106	7

Dimensions are a guide only. Please ask for certified drawing when ordering.

## Model U

This is a powerful, permanent magnetic separator for liquid-line applications. It uses a Rare Earth magnet circuit to remove fine and weakly magnetic contamination like rust, scale or screen wire, and removes ferrous contamination from difficult-to-flow or chunky products like vegetables, salsa or meat batters.

The special body design of the Model U incorporates a gradually tapered transition that gently directs the product over a smooth magnetic surface. The body design does not incorporate diverters or baffles. This design works well for applications where large pieces would plug finger-style traps, or where delicate products would break if forced against a baffle.

The Model U Trap's compact design can be installed easily into 76mm (3") or 102mm (4") lines. The standard unit is sanitary, incorporates Eriez Super-Strength Rare Earth magnet element, is of 316 stainless steel construction and has BSP threaded ends.

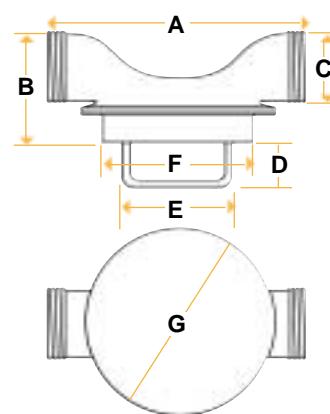
Optional features include stronger and high temperature Rare Earth magnet circuits, ferrule and flanged ports.



## Specifications

Model	Pipeline Size	Dimensions (mm)					Nominal Weight (kg)		
		A	B	C	D	E			
U3	76 (3")	356	149	76	70	146	203	254	15
U4	102(4")	356	178	102	70	146	203	254	18

Dimensions are a guide only. Please ask for certified drawing when ordering.



## Eriez Magnetics Europe Limited

European Manufacturing, Design and Test Laboratory Headquarters  
Bedwas House Industrial Estate, Bedwas, Caerphilly CF83 8YG, UK

Telephone: 029 2086 8501 Fax: 029 2085 1314

Int Tel: +44 29 2086 8501 Int Fax: +44 29 2085 1314

E-mail: eriez@eriezeurope.co.uk

www.eriez.com