

Filler Breathers, Strainers, Diffusers, Fluid Level/Temperature Gauges



ENGINEERING YOUR SUCCESS.

## **Anti-Splash Design**

## Non-Metallic Filler Breathers

## **Specifications**

Materials:

Body: Non-corrodible glass filled nylon

Valve: Nylon/Nitrile

Dipstick: ABS, acetal Hi/Lo indicators

Filtration Element: Expanded polyurethane foam, 10 micron Operating Temperatures: -22°F (-30°C) to 195°F (90°C)

Seals: Nitrile (single-hole), cork gasket (six-hole)

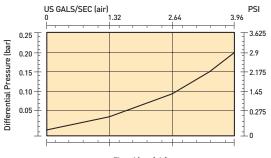
Pressurization Options: 3 psi (0.2 bar)

Dipstick: (optional) 7.9 in. (200 mm) or 15.8 in. (400 mm) lengths

with adjustable Hi/Lo indicators



#### (Non-pressurized)



Flow 1/sec (air) (Pressurized)

3psi (.2 bar) valve

Flow l/sec (air)

3.96

17.4

14.5

11.6

8.7

5.8

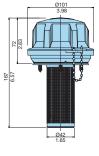
2.9

n

# 271



Six-Hole Option





Linear Measurement=

## Non-pressurized

1.2

1.0

0.8

0.6

0.4

0.2

Differential Pressure (bar)

_	Six-Hole Part Number	Micron Rating	Description	Screws*
AB98210011	AB.98810011.UC	10	Filler breather w/ 3.7" (95 mm) strainer	(6)-#10x.5
AB98210021	AB.98810021.UC	10	Filler breather w/ telescopic strainer	(6)-#10x.5

#### **Pressurized**

Single-Hole Part Number	Six-Hole Part Number	Micron Rating	Description	Screws*
Not available	AB.98812021.UC	10	3 psi (.2 bar) with telescopic strainer	(6)-#10x.5

## **Dipsticks**

Part Number	Description
B68206	Pack of (10) x 7.9"
B68207	Pack of (10) x 15.8"

\*Mounting screws for six-hole only

## Non-Metallic Breathers

## **Threaded Type**

## **Specifications**

Materials: Body: Nylon 66 Valve: Nylon/Nitrile

Dipstick: ABS, acetal Hi/Lo indicators

**Filtration Element:** Expanded polyurethane foam, 10 micron **Operating Temperatures:** -22°F (-30°C) to 195°F (90°C)

Seals: Nitrile

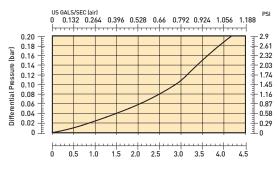
Pressurization Options: 3 psi (0.2 bar)

**Dipstick:** (optional) 7.9 in. (200 mm) or 15.8 in.(400mm)

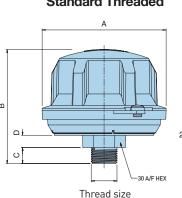
lengths with adjustable Hi/Lo indicators



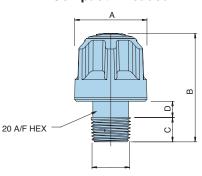
#### **COMPACT THREADED**



#### **Standard Threaded**



## **Compact Threaded**



Thread size

#### Compact Threaded (dimensions inches(mm))

Single-Hole Part Number	Micron Rating	Thread	Pressure	A	В	С	D
943296*	10	1/4" NPT	non-pressurized	1.6 (40)	2.2 (57)	.55 (14)	.24 (6)
943298*	10	1/2" NPT	non-pressurized	1.6 (40)	2.4 (60)	.53 (13.5)	.35 (9)
942642*	10	3/4" NPT	non-pressurized	1.6 (40)	2.4 (60)	.55 (14)	.35 (9)
943297	10	3/8" NPT	non-pressurized				

## Standard Threaded (dimensions inches(mm))

Single-Hole Part Number	Micron Rating	Thread	Pressure	A	В	С	D
AB.98410201.UC	10	3/4" NPT	non-pressurized	4.0 (101)	3.8 (95)	.63 (16)	.39 (10)
AB.98412201.UC	10	3/4" NPT	3 psi (.2 bar)				

#### **Dipsticks**

<u> </u>	
Part Number	Description
B68206	Pack of (10) x 7.9"
B68207	Pack of (10) x 15.8"

## Metal Filler Breathers

## Flange Type

## **Specifications**

Materials:

Cap & Plate: Nickel chrome plated steel

Valve: Nylon/Nitrile

Gasket: Cork

Filtration Element: Expanded polyurethane foam, 10

micror

Operating Temperatures: -22°F (-30°C) to 195°F (90°C)

Seals: Nitrile

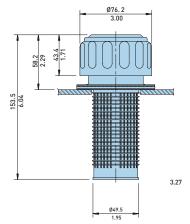
AB.1380.10

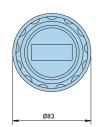
Pressurization Options: none, 5 psi (0.35 bar)

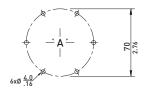


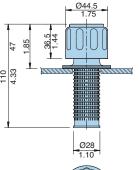






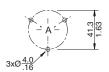








1.75 (44.5) diameter



Linear Measurement= mm in

Drawings are for reference only. Contact factory for current version.

Flange type,	Non-pressurize	Contact factory for	r current versior		
Part Number	Cap Assembly	Micron Rating	Air Flow	Description	Screws
AB116310	CAP.1163.10	10	2 gal/sec (7.5 l/sec)	3 (76) diameter	(6)-#10x.5
5561	NA	10	2 gal/sec (7.5 l/sec)	3 (76) diameter w/ lock lug	(6)-#10x.5

## Flange type, Pressurized (dimensions inches(mm))

10

CAP.1380.40

Part Number	Cap Assembly	Micron Rating	Air Flow	Description	Screws
PAB.1730.10.5	CAP.1730.40.5	10	2 gal/sec (7.5 l/sec)	5 psi (.35 bar), 3" (76mm) diameter	(6)-#10x.5

1.3 gal/sec (5 l/sec)

(6)-#10x.5

## Metal Breathers

## **Threaded Type**

## **Specifications**

. Materials:

Cap & Plate: Nickel chrome plated steel

Valve: Nylon/Nitrile

Gasket: Cork

**Filtration Element:** Expanded polyurethane foam, 10 micron **Operating Temperatures:** -22°F (-30°C) to 195°F (90°C)

Seals: Nitrile

Pressurization Options: none, 5 psi (0.35 bar)

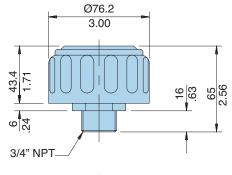




34" Threaded

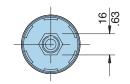
35

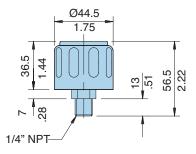
Linear Measurement= mm





1/4" Threaded







Drawings are for reference only. Contact factory for current version.

## Threaded, Non-pressurized (dimensions inches(mm))

Single-Hole Part Number	Micron Rating	Thread	Air Flow	Description
SAB.1562.10.NPT	10	3/4" NPT	1.3 gal/sec. (5 l/sec)	3 (76) diameter
SAB.1563.10.NPT	10	1/4" NPT	0.7 gal/sec. (2.5 l/sec)	1.75 (44.5) diameter

# **E Z Dri Breathers**

## **Applications**

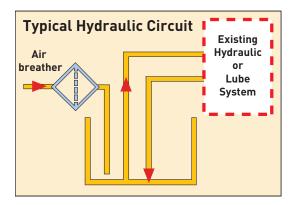
- Reservoirs
- Mobile Equipment
- Small Gearboxes
- Transformers

- Storage Tanks
- Totes
- 55 Gallon Drums



Atmospheric ingression of air borne contaminants are key contributors to hydraulic, circulating oil and splash lubrication systems. As temperature fluctuates or fluids are displaced, systems draw air into the fluid reservoir. The reservoir breather becomes a critical barrier to solid contaminants and water vapor. Conversely, when fluids return to the fluid reservoir, air exhausts to the environment.

E Z Dri breathers provide contamination control in these critical areas. Water vapor is captured through the use of highly efficient zeolite desiccant. Solid contaminants are removed to  $3\mu$  through a series of high efficiency particulate filters. The production environment and plant personnel are safe from hydrocarbon vapors, during air exhaust, with the aid of an activated carbon filter.



## **Features**

- ZEOLITE adsorbent maximizes water adsorption capacity, less than 100 ppm H2O
- Optimal flow via diffusion filters
- Multi-layer filtration (2) diffusion filters, activated carbon, 3µ PTFE filter, 100µ stainless steel filter
- ZEOLITE thermal efficiency (efficient at all temps.)

- Diffusion cap replaces use of valves to control air flow, allows for long term storage
- Flexibility 1" slip fit adapters
- UV resistant to prevent discoloring
- Oil Mist Coalescer Manifold Adapter (OMCOL)
- Easy visible color indication of spent adsorbent

#### **Bi-directional Air Flow**

Air entering the breather is filtered and dried. Air expelled through the breather is filter through an activated carbon filter, prolonging the life of the breather.

#### **Rugged construction**

E Z Dri breathers are made of hard PVC plastic and UV resistant polycarbonate tube.

#### **ZEOLITE** adsorbent

ZEOLITE adsorbent provides up to 28% by weight adsorption and provides clean dry air less than 100 PPM. ZEOLITE also maintains performance in high temperature environments, unlike Silica Gel.

#### **Multi-layer filtration**

All E Z Dri breathers features (2) diffusion filters, an activated carbon filter, 3µ PTFE filter, and 100µ stainless steel filter

#### **Diffusion technology**

The diffusion cap replaces the need for mechanical valves to control air flow. The breathers will only breathe over 0.3 PSI

#### Application flexibility

E Z Dri breathers feature a standard 1" slip fit which easily adapts to many applications.

#### **Color Indication**

When maximum adsorption is reached, the blue indicating ZEOLITE beads will turn from blue to beige, to indicate that a replacement is required.

## Specifications

## **General Data**

	934330	934331	934332	941655
Amount of ZEOLITE	376 g	604 g	822 g	722 g
Amount of Zeolife	16.3 oz	21.3 oz	28.9 oz	25.5 g
Adsorption Capacity	52.6 g	84.6 g	115.1 g	101.1 g
Ausorption Capacity	1.86 oz	2.98 oz	4.06 oz	3.57 oz
Not Woight of Unit	700 g	980 g	1255 g	1294 g
Net Weight of Unit	1.5 lbs	2.2 lbs	2.7 lbs	2.85 lbs
Filtration Area	8.4 in <sup>2</sup> / 54.2 cm <sup>2</sup>			
<b>Direction of Flow</b>	Bidirectional	Bidirectional	Bidirectional	Bidirectional
Operating Temperature Range	-40°F to 302°F / -40°C to 150°C			

## **Hygroscopic Agent (Zeolite)**

Apparent Bulk Density	700 - 800 kg/m3
Average Particle Diameter	0.145" / 3.68 mm
Specific Heat	0.25 BTU/lb. F
Nomimal Mesh Range	4 x 8
Average Crush Strength	35 lbs. / 15.9 kg

## **Unit Material Data**

Material	UV Resistant Polycarbonate
Maximum Operating Temperature	302°F / 150°C
Melting Point	320°F / 160°C
Check Valve Adapter	Zinc Plated Steel

## **Filter Media**

Material	EPTFE
Porosity	3.5 - 7.5 Ft./min. @ 0.5 in H2O (ASTM D 737)
Air Filtration Efficiency	99.97% @ 0.3µ (IES-RP-CC021.1)

# **E Z Dri Breathers**

## Desiccant Type

## **Specifications**

**Materials:** 

Casing: PVC plastic

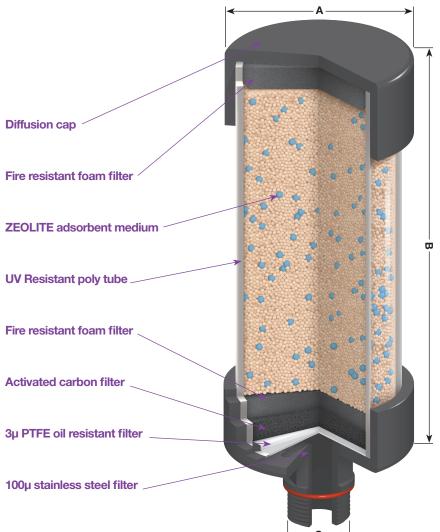
Stand pipe: UV resistant polycarbonate tube

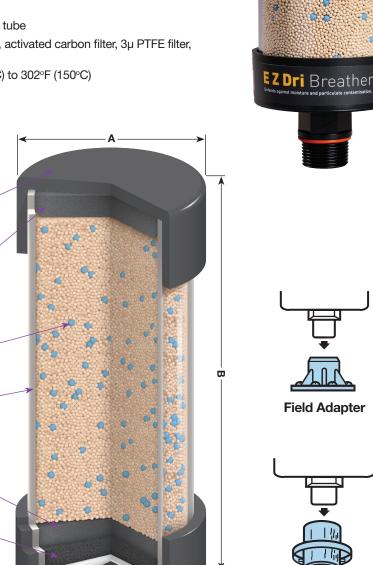
Multi-layer Filtration: 2 diffusion filters, activated carbon filter, 3µ PTFE filter,

100µ stainless steel filter

**Operating Temperatures:** -40°F (-40°C) to 302°F (150°C)

Seals: None





Part Number	A (in/mm)	B (in/mm)	С	Qty
934330	3.87 / 98.3	5 / 127	1" NPT thread	6 pcs
934331	3.87 / 8.3	7 / 177.8	1" NPT thread	6 pcs
934332	3.87 / 98.3	9 / 228.6	1" NPT thread	6 pcs



Part Description		Qty
937546	Field Adapter	1 pc
937463	Flange Adapter	1 pc

Flange Adapter

## Mobile Version

## **Specifications**

**Materials:** 

Casing: PVC plastic

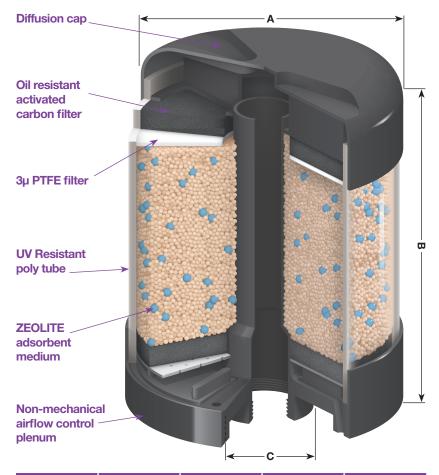
Stand pipe: UV resistant polycarbonate tube

Multi-layer Filtration: 2 diffusion filters, activated carbon filter, 3µ PTFE filter,

100µ stainless steel filter

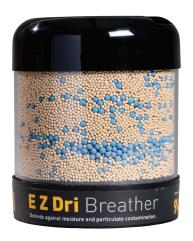
**Operating Temperatures:** -40°F (-40°C) to 302°F (150°C)

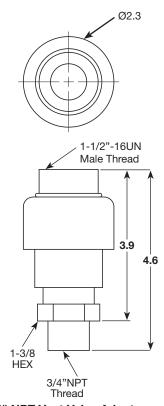
Seals: None



Part Number	A (in/mm)	B (in/mm)	С	Qty
941655	5.25 / 133.4	6.17 / 156.7	1.5" NPT thread	1 pc*

<sup>\*</sup> Must be ordered in multiples of six (6).





3/4" NPT Vent Valve Adapter

Prolongs breather life by diverting air exhausting from reservoir away from desiccant bed.

For mobile applications where oil sloshing can occur, it prevents oil coating desiccant bed. Resulting in diminished performance of the breather's water absorption efficiency.

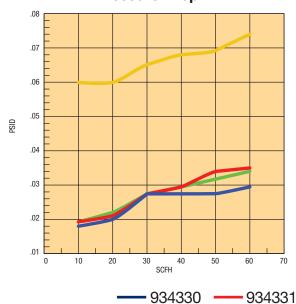
Part Number	Description	Qty
946056	Vent Valve Adapter	1 pc

## Performance

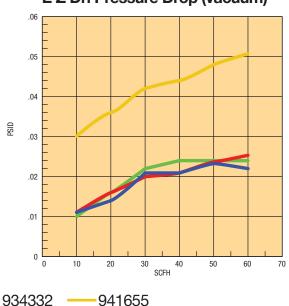
### **Air Flow Performance**

The curves below show the air flow performance of the EZ Dri breathers. To insure the longest life possible, the initial clean pressure drop should not exceed 1.5 psid (.103 bar).

## **E Z Dri Pressure Drop**



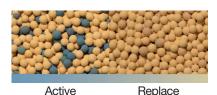
## E Z Dri Pressure Drop (vacuum)



941655

#### **Maintenance**

EZDri breathers are designed for simple installation on most equipment, regardless of mounting connection. Since EZ Dri breathers are disposable, the threaded connection allows for quick and easy maintenance. Several mounting adapters (see page 4) are available to provide the desired mounting. The installation/replacement process consists of three easy steps:



#### Installation

- 1. Remove breather from plastic baq
- 2. Remove safety cap from standpipe at the bottom of the breather
- 3. Mount the breather to the tank or reservoir using the adapter best suited for the application

#### **Disposal**

- 1. Verify that the breather is fully saturated - \*all blue beads will be beige in color
- 2. Remove breather from gearbox, tank, reservoir, or other application
- 3. Remove and save the adapter fitting to be used with a new breather
- 4. Verify and dispose of breather in accordance with your state and local environmental control regulations

## Recommendations

- Replace spin on air filter vents, turn down pipes, or vent caps with E Z Dri disposable desiccant breathers for additional protection against contaminants.
- Inspecting your breather every 6 months.
- Add breather replacements to plant operations & maintenance schedules

## Breathers - Spin-On Type

## **Reservoir Breather**

#### **Sizing**

Select the proper size canister for the maximum rate of reservoir draw down or air exchange rate. As a rule of thumb, clean pressure drop should be limited to 0.18 psid (5"  $\rm H_2O$ ).

A pipe flange, weld collar, etc. may be used to connect the adapter kit to the reservoir. Make sure that air is not able to leak around the adapter. When mounting on the side of the reservoir, make sure the installation is above the surface of the fluid.

Recommended canister change out is after 500 hours of operation. More frequent replacement may be required when operated in heavily contaminated areas such as grinding operations, primary metal mills, and on mobile equipment. Under such conditions, increase replacement frequency to every 250 hours.

Model	Air Rating*	Canister	Adapter Kit
12AT-03C	1 micron	926543	926876
12AT-10C	2 micron	921999	926876
12AT-25C	5 micron	925023	926876
50AT-03C	1 micron	926541	926875
50AT-10C	2 micron	926169	926875
50AT-25C	5 micron	926170	926875

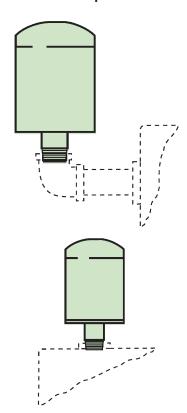
<sup>\* 99%</sup> Removal efficiency for particles larger than the stated size in air.

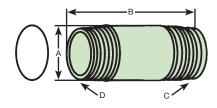
Graphs are for 03C canisters only. Total pressure drop across canister, adapter, and pipe may be found by adding pressure drops below:

- + 1.5% for each inch of 12AT adapter or 3/4" pipe used.
- + 3.0% for each 3/4" elbow used.
- + 1.0% for each inch of 50AT adapter or 1-1/4" pipe used.
- + 2.0% for each 1-1/4" elbow used.



## Typical Installations mounted on side or top of reservoir





	12AT	50AT
PN	926876	926875
Α	26.70 (1.05)	42.70 (1.66)
В	66.80 (2.63)	85.10 (3.35)
С	3/4" NPT	1-1/4" NPT
D	1"-12 UN	1-1/2"-16 UN

Allow 1.25" for canister removal clearance

Linear Measure: millimeter inch

## **Diffusers**

## **Specifications**

Operating Temperatures: 195°F (90°C) maximum

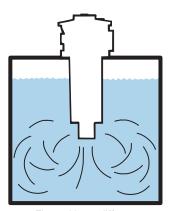
Materials: Body & end cap: Zintec

Head: glass-filled nylon

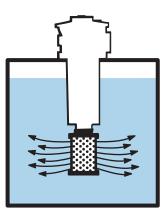
Weight: See chart below

#### **Benefits:**

Installing a diffuser in a hydraulic reservoir is a simple change that can make a dramatic difference in system efficiency. With special concentric tubes designed with discharge holes  $180^{\circ}$  opposed, fluid aeration, foaming and reservoir noise are reduced. Pump life is also extended by reducing cavitation to the pump inlet. The effects of fitting a system with a diffuser are shown below.

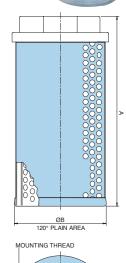


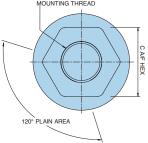
Flow without diffuser



Flow with diffuser fitted







Part Number	Thread (NPT)	Nominal Flow gpm (lpm)	Length A inch (mm)	Diameter B Inch (mm)	HEX C inch (mm)	Weight lbs (kg)
2250	3/4"	13 (50)	4.7 (120)	2.4 (62)	1.81 (46)	0.60 (0.27)
2251	1"	30 (114)	5.0 (127)	3.4 (86)	2.17 (55)	0.93 (0.42)
2252	1 1/2"	60 (227)	7.0 (178)	3.4 (86)	2.56 (65)	1.23 (0.56)
2253	2"	120 (454)	9.5 (242)	3.4 (86)	2.95 (75)	1.52 (0.69)

## Fluid Level/Temperature Gauges

## **Specifications**

Materials:

Lens: Transparent polyamide

Lens base: Nylon 66

Shroud: High impact polystyrene (no aluminum content)

Seals: Nitrile

Maximum Operating Pressure: 14.7 psi (1 bar)

**Operating Temperatures:** -22°F (-30°C) to 195°F (90°C) **Thermometer Range:** 90°F to 210°F (30°C to 90°C)

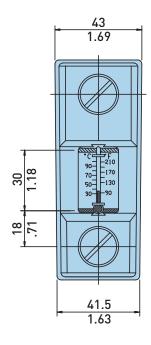
Indicator: Blue alcohol

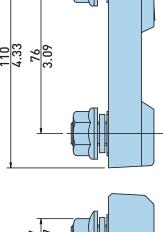
Fluid Compatibility: Mineral and petroleum based fluids

**Mounting:** Front or rear fixing, two holes (M10)

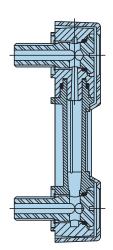


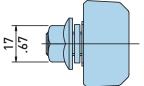
## Length 3





18.5





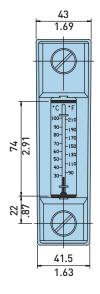
Linear Measurement= mm in

Drawings are for reference only.
Contact factory for current version

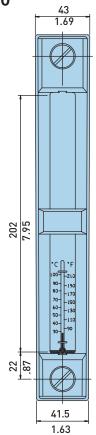
Part Number	Thread	Length	Description
FL69121	M10	3	Fluid level and temperature
FL69221	M10	5	Fluid level and temperature
FL69321	M10	10	Fluid level and temperature

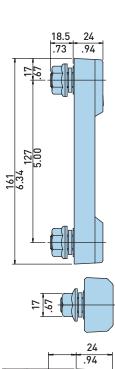
## Fluid Level/Temperature Gauges

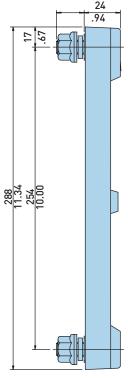
## Length 5

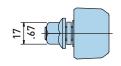


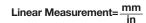


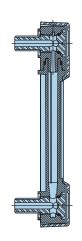


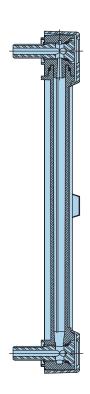












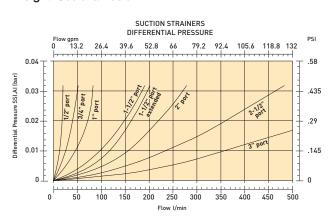
## **Suction Strainers**

# **Specifications** Materials:

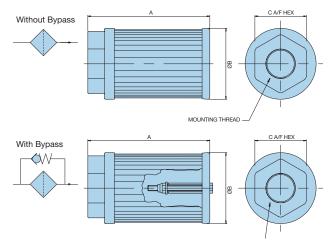
Media: Stainless steel Tube and endcap: Zintec Head: glass filled nylon

Filtration Element: 100 mesh (149 micron) Operating Temperatures: 195°F (90°C) maximum

Bypass: None, 3 psi (0.2 bar) Weight: See chart below







Part Number With Bypass	Bypass	Port (NPT)	Nominal Flow GPM (LPM)	Length "A" Inch (mm)	Diameter "B" Inch (mm)	BSPP Fitting
937480	No	1/2"	5 (19)	4.125 (104.8)	1.90 (48.3)	No
937481	Yes	1/2"	5 (19)	4.125 (104.8)	1.90 (48.3)	No
937482	No	3/4"	8 (30)	3.55 (90.2)	2.67 (67.8)	No
937483	Yes	3/4"	8 (30)	3.55 (90.2)	2.67 (67.8)	No
937484	No	1"	10 (38)	5.25 (133.4)	2.67 (67.8)	No
937485	Yes	1"	10 (38)	5.25 (133.4)	2.67 (67.8)	No
937488	No	1-1/2"	30 (114)	8.01 (203.5)	3.47 (88.4)	No
937489	Yes	1-1/2"	30 (114)	8.01 (203.5)	3.47 (88.4)	No
937490	No	1-1/2"	50 (189)	9.85 (250.2)	4.00 (101.6)	No
937491	Yes	1-1/2"	50 (189)	9.85 (250.2)	4.00 (101.6)	No
937492	No	2"	50 (189)	9.85 (250.2)	4.00 (101.6)	No
937493	Yes	2"	50 (189)	9.85 (250.2)	4.00 (101.6)	No
937494	No	2-1/2"	75 (284)	10.10 (256.5)	5.17 (131.3)	No
937495	Yes	2-1/2"	75 (284)	10.10 (256.5)	5.17 (131.3)	No
937496	No	3"	100 (378)	11.50 (292.1)	5.17 (131.3)	No
937497	Yes	3"	100 (378)	11.50 (292.1)	5.17 (131.3)	No

## Magnetic Suction Strainers

# Magnetic Suction Strainers Dual protection, without cavitation!

Parker's new magnetic suction strainers offer dual protection to the pump inlet without risk of cavitation.

Powerful ceramic magnets located parallel to the pleated mesh attract and protect against damaging ferrous particles of all sizes.

The pleated stainless steel screen provides additional filtration protection for larger particles that would result in catastrophic failure.

The generous open area of the stainless steel pleated mesh screen elimantes the possibility of pump cavitation.

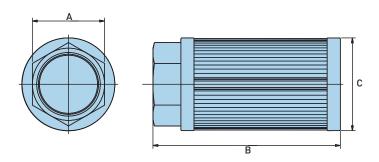
#### **Ordering Information**

The information below shows the part numbers, specifications and dimensions of available suction strainers, to help you meet the needs of your specific application.

NOTE: All sizes are standard with 30 mesh screen (560 micron).

		Flow	Dimensions			Approx. Shipping
Part Number	NPT Connection	GPM (LPM)	A inches (mm)	B inches (mm)	C inches (mm)	Weight lbs. (kg)
936547	1.00"	15 (55)	1.88 (47.75)	5.19 (131.83)	3.09 (78.49)	1.59 (0.72)
936548	1.25"	25 (95)	2.38 (60.45)	7.39 (187.71)	3.53 (89.66)	3.16 (1.43)
936549	1.50"	35 (135)	2.38 (60.45)	7.39 (187.71)	3.53 (89.66)	2.88 (1.31)
936550	2.00"	50 (190)	2.75 (69.85)	7.39 (187.71)	3.53 (89.66)	2.22 (1.01)
936551	3.00"	100 (380)	*	9.35 (237.49)	4.47 (113.54)	3.91 (1.77)

<sup>\*</sup>Part number 936551 features a 3" half coupling, not a hex nut.



Flow Vs. Pressure Loss

5 4 1.00" 1.25" 1.50" 2.00" 3.00"

Flow (GPM)



Parkers magnetic suction strainers are available in sizes ranging from one to three inches.



The rugged steel construction, combined with the generous filtration area, ensures reliable performance for suction applications