

## RING VAC®

Convey solid materials, waste, trim, small parts with virtually no moving parts

### WHAT ARE THEY - REASONS TO USE

The Ring Vac® - Pneumatic Conveying System has virtually no moving parts, conveys material at high rates and over long distances. They utilize only compressed air for a powerful, efficient venturi action along its length in a compact design for high capacity conveying over large distances. Ring Vacs are available in both coated aluminum or stainless steel. Simply clamp a standard hose size to each end of the Ring Vac™ to create this high energy conveying system. Threaded versions may be connected into standard pipe thread. No moving parts for maintenance free operation with capacity and flow controlled with a pressure regulator. Sizes are 3/8" (10mm), 1/2" (13mm), 3/4" (19mm), 1" (24.4mm), 1-1/4" (32mm), 1-1/2" (38mm) and 2" (51mm) and 3" (76.2mm). Any size beyond that can be prohibitive for most applications due to high compressed air requirements.

Beyond 3", the vacuum ability begins to drop significantly except for highly intermittent applications. However 3" units are available for such applications. Larger sizes are available on special order.

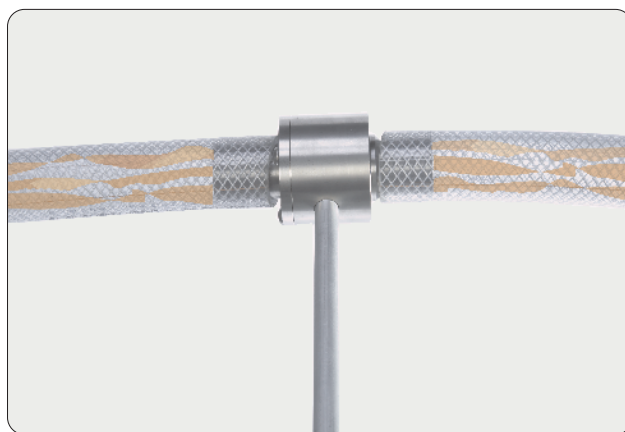
Anodized aluminum and high temperature stainless steel Ring Vac® air conveyor can convey all types of solids in large volumes over great distances with no moving parts.

### APPLICATIONS:

- ▶ Hopper Loading
- ▶ Material Conveying
- ▶ Trim Removal
- ▶ Transfer Parts
- ▶ Filling Operations
- ▶ Thread/fiber Tensioning

### RING VAC® BENEFITS:

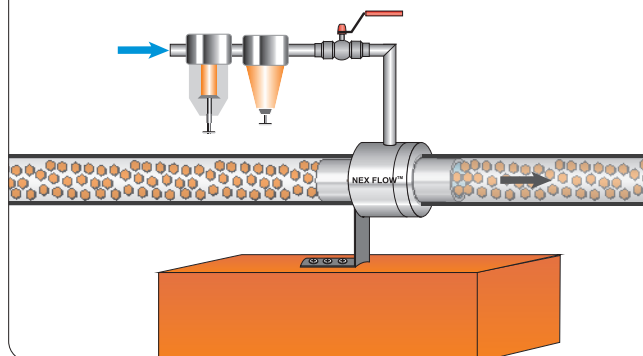
- Longer life in difficult environments than competitive models.
- Ease of use.
- Simple and easy control of material flow.
- Maintenance free operation.



### RING VAC® FEATURES:

- ▶ Made of anodized aluminum with no moving parts. Regular and high temperature stainless steel models are available for higher temperature and corrosive environments. 316L stainless steel units from 1" to 3" are available with standard sanitary flanges for food pharmaceutical and other sanitary application.
- ▶ Standard sizes to fit standard hose diameter for easy clamping. Threaded versions connect easily to regular pipe thread : 1" (25mm), 1-1/4" (32mm), 1-1/2" (38mm), 2" (51mm). Special sizes can be manufactured if required.
- ▶ Utilizing a pressure regulator will control the flow material.
- ▶ Instant on/off with no moving parts, no electricity or explosion hazard.

A Model 30004S Stainless Steel 2" Ring Vac® Air operated conveyor moves dried peas at a pet food manufacturing facility.



## TYPES OF RING VACS

The Ring Vac® Pneumatic Conveying System is available in anodized aluminum, 303/304 stainless steel and in 316L stainless steel. Our special high temperature stainless version is rated to 1200°F (649°C)

Unit with sanitary flanges for sanitary applications are 316L and comes in standard temperature version and high temperature versions for use up to 1200°F (649°C)

Regular models connect to a standard hose or tube to provide a powerful and simply in-line conveying system. Threaded versions thread directly into threaded pipe.

Special materials can be utilized for unique applications. If greater conveying force is required the conveying “generator” can be machined for higher capacities although they will use more compressed air.

An optional bracket allows for easy mounting.



Standard Ring Vac®  
Air operated conveyor



Threaded Ring Vac®  
Air operated conveyor



316L Stainless Steel Ring Vac® Air operated  
conveyor with Sanitary Flange

## SELECTION

The Ring Vac® is available in a wide variety of sizes depending on your application. There are certain criteria to determine the size you need:

- ▶ Diameter of the parts that need to be conveyed
- ▶ Rate required for conveying (by weight or volume)
- ▶ Diameter of the tube, pipe or hose used
- ▶ Material- Aluminum, stainless or high temperature (To 1200°F (650°C)) stainless
- ▶ Hose connection with clamp or threaded unit



Ring Vac® Air Operated Conveyors are easily mounted utilizing Stainless Steel mounting Brackets as shown.

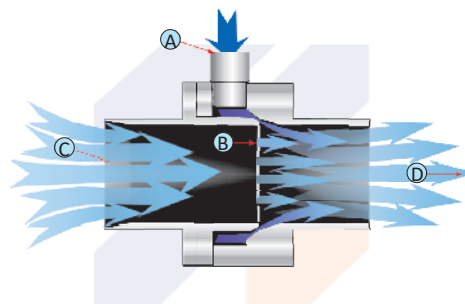
Stainless Steel Mounting Bracket

## SPECIAL DESIGNS

The high temperature models are suited to temperatures up to 1200°F (650°C). One ideal use is for sampling flue gases. Special versions can be supplied with medical flanges, and specific materials, higher flow rates and vacuum depending on your application.

### Ring Vac® - HOW IT WORKS:

Ring Vac® compressed air conveying system - Compressed air enters at point (A) into a annular plenum chamber and injected into the throat of the unit through directed nozzles. These jets of compressed air create a vacuum at the inlet (C) which draws in material and accelerates it through the unit and out at (D) conveying the material over a great vertical or horizontal distance.



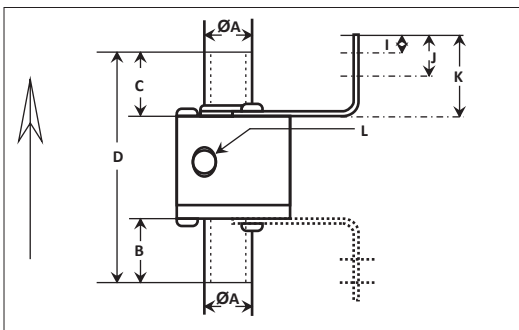
## DIMENSIONS - NOTES ON PART NUMBERS:

S - stainless    TS - threaded stainless    THTS - high temperature threaded stainless    T - threaded  
 HTS - high temperature stainless    S-316L - 316L stainless    HTS-316L - high temperature 316L stainless    Dimensions in inches and (mm)

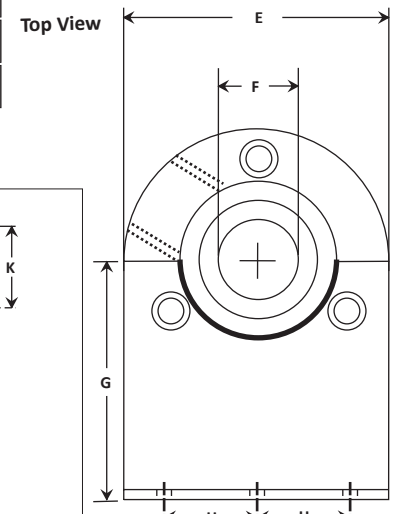
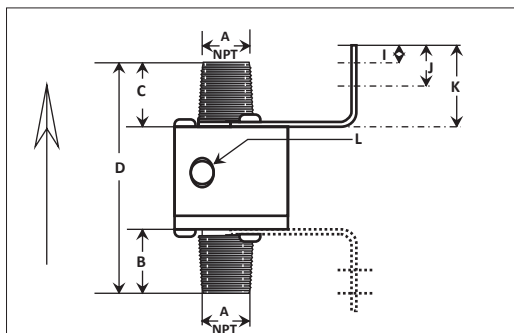
PART NUMBER (aluminum & stainless)	A IN (MM)	B IN (MM)	C IN (MM)	D IN (MM)	E IN (MM)	F IN (MM)	G IN (MM)	H IN (MM)	I IN (MM)	J IN (MM)	K IN (MM)	L
39998, 39998S 39998HTS	0.375" (10.0)	0.63" (16.0)	0.63" (16.0)	2.18" (65.0)	1.00" (25.0)	0.19" (5.0)	-	-	-	-	-	1/8" NPT
39999, 39999S 39999HTS	0.50" (13.0)	0.75" (19.0)	0.75" (25.4)	2.62" (19.0)	1.25" (32.0)	0.31" (8.0)	-	-	-	-	-	1/8" NPT
30000, 30000S, 30000HTS, 30000S-316L, 30000HTS-316L	0.75" (19.0)	1.00" (25.4)	1.00" (25.4)	3.94" (100.0)	1.95" (49.5)	0.55" (14.0)	1.92" (48.73)	0.95" (15.0)	0.39" (10.0)	1.18" (30.0)	1.97" (50.0)	1/4" NPT
30001, 30001S, 30001T 30001TS, 30001HTS 30001THTS, 30001S-316L 30001HTS-316L	1.00" (25.4)	1.38" (35.1)	1.50" (38.1)	4.88" (124.0)	2.24" (56.8)	0.75" (19.0)	2.17" (55.0)	0.73" (18.5)	0.39" (10.0)	1.58" (40.0)	1.97" (50.0)	1/4" NPT
30002, 30002S, 30002T 30002TS, 30002HTS 30002THTS, 30002S-316L 30002HTS-316L	1.25" (31.8)	1.38" (35.1)	1.50" (38.1)	4.88" (124.0)	2.49" (63.2)	1.00" (25.4)	2.21" (56.3)	0.73" (18.5)	0.39" (10.0)	1.77" (45.0)	2.17" (55.0)	1/4" NPT
30003, 30003S, 30003T 30003TS, 30003HTS 30003THTS, 30003S-316L 30003HTS-316L	1.50" (38.1)	1.38" (35.1)	1.50" (38.1)	4.88" (124.0)	2.75" (69.9)	1.125" (28.6)	2.15" (54.5)	0.89" (22.5)	0.39" (10.0)	1.58" (40.0)	1.97" (50.0)	3/8" NPT
30004, 30004S, 30004T 30004TS, 30004HTS 30004THTS, 30004S-316L 30004HTS-316L	2.00" (50.8)	1.38" (35.1)	1.50" (38.1)	4.88" (124.0)	3.21" (81.6)	1.75" (44.5)	2.39" (60.7)	1.18" (30.0)	0.39" (10.0)	1.58" (40.0)	1.97" (50.0)	3/8" NPT
30005, 30005S 30005HTS	2.50" (63.5)	1.38" (35.1)	1.50" (38.1)	5.29" (134.5)	3.94" (100.0)	2.19" (55.6)	-	-	-	-	-	3/8" NPT
30006, 30006S 30006TS, 30006HTS 30006THTS, 30006S-316L 30006HTS-316L	3.0" (76.2)	1.58" (40.0)	1.58" (40.0)	5.59" (142.0)	4.33" (110.0)	2.68" (68.0)	-	-	-	-	-	1/2" NPT
30007, 30007S 30007TS, 30007HTS 30007THTS, 30007S-316L 30007HTS-316L	4.0" (101.6)	1.7" (44.4)	1.7" (44.4)	5.6" (142.9)	5.2" (133.3)	3.7" (93.6)	-	-	-	-	-	1/2" NPT
30008, 30008S 30008TS, 30008HTS 30008THTS, 30008S-316L 30008HTS-316L	5.0" (127.0)	1.7" (44.4)	1.58" (44.4)	5.6" (142.9)	6.2" (158.7)	4.7" (119.0)	-	-	-	-	-	1/2" NPT

PART NUMBER (Sanitary Flange )	A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	L
30003S-316L-SAN,30003HTS-316L-SAN	150" (38.0)	1.26" (32.0)	1.26" (32.0)	4.37" (111.0)	2.75" (69.8)	1.37" (34.8)	3/8 NPT"
30004S-316L-SAN,30004HTS-316L-SAN	201" (51.0)	1.26" (32.0)	1.26" (32.0)	4.37" (111.0)	3.21" (81.5)	1.91" (48.6)	3/8 NPT"
30005S-316L-SAN,30005HTS-316L-SAN	250" (63.50)	1.26" (32.0)	1.26" (32.0)	4.37" (111.0)	3.93" (100.0)	2.37" (60.3)	3/8 NPT"
30006S-316L-SAN,30006HTS-316L-SAN	300" (76.1)	1.73" (44.0)	1.73" (44.0)	5.63" (143.0)	4.33" (110.0)	2.87" (72.9)	1/2 NPT"

Series 30000 - 30008  
 Series 30001S - 30008S



Series 30001T - 30004T Threaded  
 Series 30001TS - 30008TS Threaded



## RING VAC® PNEUMATIC CONVEYING SYSTEM PERFORMANCE:

MODEL	SIZE OUTSIDE DIAMETER INCHES (MM)	AIR CONSUMPTION SCFM AT 80 PSIG (SLPM AT 5.5 BAR)	VACUUM INCHES H2O (KPA)
39998 / 39998S / 39998HTS	3/8" (10mm)	5.6 (158)	-120 (-29.9)
39999 / 39999S / 39999HTS	1/2" (13mm)	7 (198)	-100 (-24.9)
30000/30000S/30000HTS/30000S-316L/30000HTS-316L	3/4" (19mm)	11 (303)	-72 (-18.0)
30001 / 30001S / 30001T / 30001TS / 30001HTS / 30001THTS / 30001S-316L / 30001HTS-316L	1" (25mm)	15 (415)	-42 (-11)
30002 / 30002S / 30002T / 30002TS / 30002HTS / 30002THTS / 30002S-316L / 30002HTS-316L	1-1/4" (32mm)	26 (730)	-42(-11)
30003TS / 30003THTS / 30003HTS / 30003THTS / 30003S-316L / 30003HTS-316L	1-1/2" (38mm)	33 (932)	-39 (-9)
30004 / 30004S / 30004T / 30004TS / 30004HTS / 30004THTS / 30004S-316L / 30004HTS-316L / 30004S-316L-SAN / 30004HTS-316L-SAN	2" (51mm)	45 (1270)	-28 (-7)
30005 / 30005S / 30005HTS / 30005S-316L-SAN / 30005HTS-316L-SAN	2-1/2" (63.5mm)	58.5 (1655)	-23.5 (-6)
30006 / 30006S / 30006HTS / 30006TS / 30006THTS / 30006S-316L / 30006HTS-316L / 30006S-316L-SAN / 30006HTS-316L-SAN	3" (76mm)	69 (1940)	-14.7 (-4)
30007 / 30007S / 30007HTS / 30007TS / 30007THTS / 30007S-316L / 30007HTS-316L / 30007S-316L-SAN / 30007HTS-316L-SAN	4" (101.6mm)	95 (2690)	-13.6 (-3.4)
30008 / 30008S / 30008HTS / 30008TS / 30008THTS / 30008S-316L / 30008HTS-316L / 30008S-316L-SAN / 30008HTS-316L-SAN	5" (127mm)	128 (3625)	-10.5 (-2.6)

## RING VAC® IN-LINE CONVEYERS: ALUMINUM RING VACS

PART NO.	DESCRIPTION
39998	3/8" Aluminum Ring Vac® Only
39999	1/2" Aluminum Ring Vac® Only
30000	3/4" Aluminum Ring Vac® Only
30001	1" Aluminum Ring Vac® Only
30002	1-1/4" Aluminum Ring Vac® Only
30003	1-1/2" Aluminum Ring Vac® Only
30004	2" Aluminum Ring Vac® Only
30005	2-1/2" Aluminum Ring Vac® Only
30006	3" Aluminum Ring Vac® Only
30007	4" Aluminum Ring Vac® Only
30008	5" Aluminum Ring Vac® Only
31998	3/8" Aluminum Ring Vac® Plus Filter with Auto Drain
31999	1/2" Aluminum Ring Vac® Plus Filter with Auto Drain
31000	3/4" Aluminum Ring Vac® Plus Filter with Auto Drain
31001	1" Aluminum Ring Vac® plus Filter with Auto Drain
31002	1-1/4" Aluminum Ring Vac® plus Filter with Auto Drain
31003	1-1/2" Aluminum Ring Vac® plus Filter with Auto Drain
31004	2" Aluminum Ring Vac® plus Filter with Auto Drain
31005	2-1/2" Aluminum Ring Vac® Plus Filter with Auto Drain
31006	3" Aluminum Ring Vac® Plus Filter with Auto Drain
31007	4" Aluminum Ring Vac® Plus Filter with Auto Drain
31008	5" Aluminum Ring Vac® Plus Filter with Auto Drain
32998	3/8" Aluminum Ring Vac® Plus Filter with Auto Drain and Regulator with Gauge
32999	1/2" Aluminum Ring Vac® Plus Filter with Auto Drain and Regulator with Gauge
32000	3/4" Aluminum Ring Vac® Plus Filter with Auto Drain and Regulator with Gauge
32001	1" Aluminum Ring Vac® plus Filter with Auto Drain & Regulator with Gauge
32002	1-1/4" Aluminum Ring Vac® plus Filter with Auto Drain & Regulator with Gauge
32003	1-1/2" Aluminum Ring Vac® plus Filter with Auto Drain & Regulator with Gauge
32004	2" Aluminum Ring Vac® plus Filter with Auto Drain & Regulator with Gauge
32005	2-1/2" Aluminum Ring Vac® Plus Filter with Auto Drain and Regulator with Gauge
32006	3" Aluminum Ring Vac® Plus Filter with Auto Drain and Regulator with Gauge
32007	4" Aluminum Ring Vac® Plus Filter with Auto Drain and Regulator with Gauge
32008	5" Aluminum Ring Vac® Plus Filter with Auto Drain and Regulator with Gauge
30001T	1" Threaded Aluminum Ring Vac® Only
30002T	1-1/4" Threaded Aluminum Ring Vac® Only