# RING VAC<sup>TM</sup> AIR OPERATED CONVEYOR SYSTEMS

# **RING VAC**<sup>™</sup>

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

### **WHAT ARE THEY - REASONS TO USE**

**NEX FLOW** 

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 1" (25mm), 1-1/4" (32mm), 1-1/2" (38mm) and 2" (51mm). Any size beyond that can be prohibitive for most applications due to high compressed air requirements.

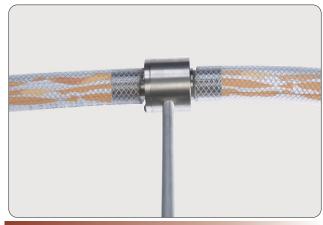
Beyond 2", the vacuum ability begins to drop significantly except for highly intermittent applications. For applications beyond 2", a blower system often becomes far more economical except in a rare number of possible applications. However, larger size versions are available on special order. Anodized aluminum and high temperature stainless steel Ring Vac<sup>™</sup> 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

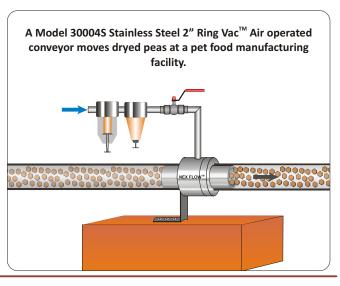
### **RING VAC™ BENEFITS:**

- ▶ 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.
- 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.





### TYPES OF RING VACS

The Ring Vac<sup>™</sup> Pneumatic Conveying System is available in anodized aluminum and in stainless steel. Our special high temperature stainless version is rated 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.



### **SELECTION**

The Ring Vac<sup>™</sup> 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<sup>™</sup> Air Operated Conveyors are easily mounted utilizing Stainless Steel mounting Brackets as shown.

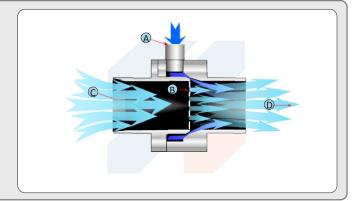
**Stainless Steel Mounting Bracket** 

### **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<sup>™</sup>-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 though 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

Т - threaded

TS - threaded stainless

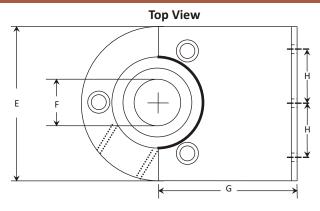
- high temperature stainless

THTS - high temperature threaded stainless

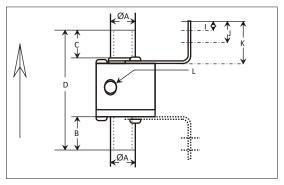
### Dimensions in inches and (mm)

and (min)												
PART NUMBER (aluminum & stainless)	A	В	С	D	E	F	G	Н	I	J	K	L*
30001, 30001S, 30001T 30001TS, 30001HTS 30001THTS	1.00" (25.4)	1.38" (35.1)	1.25" (31.8)	5.00" (127)	2.25" (57.2)	3/4" (19)	2.38" (60.3)	0.78" (19.7)	0.38" (9.5)	0.94" (23.8)	1.75" (44.5)	1/4 NPT
30002, 30002S, 30002T 30002TS, 30002HTS 30002THTS	1.25" (31.8)	1.38" (35.1)	1.25" (31.8)	5.00" (127)	2.50" (63.5)	1.00" (25.4)	2.38" (60.3)	0.78" (19.7)	0.38" (9.5)	0.94" (23.8)	1.75" (44.5)	1/4 NPT
30003, 30003S, 30003T 30003TS, 30003HTS 30003THTS	1.50" (38.1)	1.38" (35.1)	1.25" (31.8)	5.00" (127)	2.75" (69.9)	1.25" (38.1)	2.38" (60.3)	0.78" (19.7)	0.38" (9.5)	0.94 (23.8)	1.75 (44.5)	3/8 NPT
30004, 30004S, 30004T 30004TS, 30004HTS 30004THTS	2.00" (51.8)	1.38" (35.1)	1.25" (31.8)	5.00" (127)	3.25" (82.6)	1.75" (44.5)	2.38" (60.3)	0.78" (19.7)	0.38" (9.5)	0.94" (23.8)	1.75" (44.5)	3/8 NPT

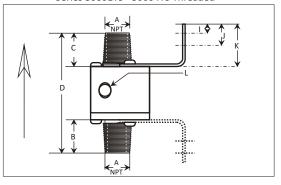
### \*BSP Threads or Adaptors can be supplied depending on country location.



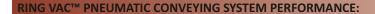
Series 30001 - 30004 Series 30001S - 30004S



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







MODEL	SIZE OUTSIDE DIAMETER INCHES (MM)	AIR CONSUMPTION SCFM AT 80 PSIG (SLPM AT 5.5 BAR)	VACUUM INCHES H2O (KPA)	
30001/30001S/30001T/30001TS	1" (25mm)	15 (415)	-42 (-11)	
30001HTS/30001THTS				
30002/30002S/30002T/30002TS	1 1/4 " (32mm)	26 (730)	-42 (-11)	
30002SHTS/30002HTS				
30003TS/30003THTS	1-1/2" (38mm)	33 (932)	-39 (-9)	
30003HTS/30003THTS				
30004/30004S/30004T/30004TS	2" (51mm)	45 (1270)	-28 (-7)	
30004HTS/30004THTS				

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

PART NO.	DESCRIPTION		
30001	1" Aluminum Ring Vac™ Only		
30002	1-1/4" Aluminum Ring Vac <sup>™</sup> Only		
30003	1-1/2" Aluminum Ring Vac <sup>™</sup> Only		
30004	2″ Aluminum Ring Vac™ Only		
31001	1" Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31002	1-1/4" Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31003	1-1/2" Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31004	2" Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
32001	1" Aluminum Ring Vac™ plus Filter with Auto Drain & Regulator with Gauge		
32002	1-1/4" Aluminum Ring <sup>™</sup> Vac plus Filter with Auto Drain & Regulator with Gauge		
32003	1-1/2" Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain & Regulator with Gauge		
32004	2" Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain & Regulator with Gauge		
30001T	1" Threaded Aluminum Ring Vac™ Only		
30002T	1-1/4" Threaded Aluminum Ring Vac <sup>™</sup> Only		
30003T	1-1/2" Threaded Aluminum Ring Vac <sup>™</sup> Only		
30004T	2" Threaded Aluminum Ring Vac <sup>™</sup> Only		
31001T	1" Threaded Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31002T	1-1/4" Threaded Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31003T	1-1/2" Threaded Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31004T	2" Threaded Aluminum Ring Vac <sup>™</sup> plus Filter with Auto Drain		
32001T	1" Threaded Aluminum Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32002T	1-1/4" Threaded Alum. Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32003T	1-1/2" Threaded Alum. Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32004T	2" Threaded Aluminum Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		





4

# RING VAC<sup>™</sup> IN-LINE CONVEYERS: STAINLESS STEEL RING-VACS

PART NO.	DESCRIPTION		
30001S	1" Stainless Ring Vac <sup>™</sup> Only		
30002S	1-1/4″ Stainless Ring Vac <sup>™</sup> Only		
30003S	1-1/2" Stainless Ring Vac <sup>™</sup> Only		
30004S	2" Stainless Ring Vac <sup>™</sup> Only		
31001S	1" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31002S	1-1/4" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31003S	1-1/2" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31004S	2" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
32001S	1" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain & Regulator with Gauge		
32002S	1-1/4" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain & Regulator with Gauge		
32003S	1-1/2" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain & Regulator with Gauge		
32004S	2" Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain & Regulator with Gauge		
30001TS	1" Threaded Stainless Ring Vac <sup>™</sup> Only		
30002TS	1-1/4" Threaded Stainless Ring Vac <sup>™</sup> Only		
30003TS	1-1/2" Threaded Stainless Ring Vac™ Only		
30004TS	2" Threaded Stainless Ring Vac <sup>™</sup> Only		
31001TS	1" Threaded Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31002TS	1-1/4" Threaded Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31003TS	1-1/2" Threaded Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31004TS	2" Threaded Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
32001TS	1" Threaded Stainless Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32002TS	1-1/4" Threaded SS. Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32003TS	1-1/2" Threaded SS. Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32004TS	2" Threaded Stainless Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		



### RING VAC™ IN-LINE CONVEYERS: HIGH TEMPERATURE STAINLESS STEEL RING VACS

PART NO.	DESCRIPTION		
30001HTS	1" High Temperature Stainless Ring Vac <sup>™</sup> Only		
30002HTS	1-1/4" High Temperature Stainless Ring Vac <sup>™</sup> Only		
30003HTS	1-1/2" High Temperature Stainless Ring Vac <sup>™</sup> Only		
30004HTS	2" High Temperature Stainless Ring Vac <sup>™</sup> Only		
31001HTS	1" High Temperature Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31002HTS	1-1/4" High Temperature Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31003HTS	1-1/2" High Temperature Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31004HTS	2" High Temperature Stainless Ring Vac <sup>™</sup> plus Filter with Auto Drain		
32001HTS	1" High Temp. SS. Ring Vac <sup>™</sup> plus Filter + Auto Drain & Regulator with Gauge		
32002HTS	1-1/4" High Temp. SS. Ring Vac <sup>™</sup> plus Filter + Auto Drain & Regulator with Gauge		
32003HTS	1-1/2" High Temp. SS. Ring Vac <sup>™</sup> plus Filter + Auto Drain & Regulator with Gauge		
32004HTS	2" High Temp. SS. Ring Vac <sup>™</sup> plus Filter + Auto Drain & Regulator with Gauge		
30001THTS	1" High Temperature Threaded Stainless Ring Vac <sup>™</sup> Only		
30002THTS	1-1/4" High Temperature Threaded Stainless Ring Vac <sup>™</sup> Only		
30003THTS	1-1/2" High Temperature Threaded Stainless Ring Vac <sup>™</sup> Only		
30004THTS	2" High Temperature Threaded Stainless Ring Vac <sup>™</sup> Only		
31001THTS	1" High Temp. Threaded SS. Ring Vac™ plus Filter with Auto Drain		
31002THTS	1-1/4" High Temp. Threaded SS. Ring Vac™ plus Filter with Auto Drain		
31003THTS	1-1/2" High Temp. Threaded SS. Ring Vac <sup>™</sup> plus Filter with Auto Drain		
31004THTS	2" High Temp. Threaded SS. Ring Vac <sup>™</sup> plus Filter with Auto Drain		
32001THTS	1" High Temp. Threaded SS. Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32002THTS	1-1/4" High Temp. Threaded SS. Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32003THTS	1-1/2" High Temp. Threaded SS. Ring Vac <sup>™</sup> & Filter + Auto Drain & Regulator with Gauge		
32004THTS	2" High Temp. Threaded SS. Ring Vac™ & Filter + Auto Drain & Regulator with Gauge		
PART NO.	DESCRIPTION		
39001S	Stainless Steel Bracket for 30001, 30001T, 30001S, 30001TS, 30001HTS, 30001THTS		
39002S	Stainless Steel Bracket for 30002, 30002T, 30002S, 30002TS, 30002HTS, 30002THTS		
39003S	Stainless Steel Bracket for 30003, 30003T, 30003S, 30003TS, 30003HTS, 30003THTS		
200046.4			



39004S-A

39004S-S

Stainless Steel Bracket for 30004S, 30004TS, 30004HTS, 30004THTS

Stainless Steel Bracket for 30004 and 30004T