



## Full-Flow Air Knife™

This low cost choice provides a curtain of air for blowoff, cleaning, drying and cooling.



### What Is The Full-Flow Air Knife?

EXAIR's Full-Flow Air Knife is an effective way to clean, dry or cool parts, webs or conveyors. It utilizes the coanda effect to pull in large volumes of surrounding air, producing a high flow, high velocity curtain of air. The "Full-Flow" provides airflow across the entire length. A 12" (305mm) Full-Flow Air Knife measures 12" (305mm). It has the compressed air inlet(s) on the rear.

### Full-Flow Air Knife Specifications

The Full-Flow Air Knife is available in eight standard lengths of 3", 6", 9", 12", 18", 24", 30" and 36" (76, 152, 229, 305, 457, 610, 762 and 914mm). **Special lengths up to 36" (914mm) and unlimited system lengths are available.**

**Compressed Air Inlet(s):** A Full-Flow Air Knife has the compressed air inlet(s) on the rear. Inlets are available on each end at a small additional charge, however they are not recommended for applications where uniform airflow across the length is required.

**Filtration:** The use of clean air is essential. Kits include an automatic drain filter with a 5 micron filter element that is sized properly for flow.




**Materials of Construction:** The Full-Flow Air Knife is available in either aluminum or stainless steel construction.

**Mounting:** See page 20 of the Catalog for complete details on the Universal Air Knife Mounting System. The Full-Flow Air Knife can also be supported by the compressed air pipe.



Kits include a Full-Flow Air Knife, shim set, filter separator and pressure regulator (with coupler).

**Regulation:** A pressure regulator on the compressed air supply provides infinite control of flow, force, and air consumption. Kits include a pressure regulator that is sized properly for flow.

**Shim Sets:** A Full-Flow Air Knife has a .002" (0.05mm) gap setting. This gap is set with a shim positioned between the cap and body of the Full-Flow Air Knife. Force and flow through the Full-Flow Air Knife may be easily increased by adding shims to open the gap. Kits include a shim set. Shim sets for aluminum Full-Flow Air Knives include a .001" (0.03mm) Amber color shim , .003" (0.08mm) Green color shim , and .004" (0.10mm) thick plastic Tan color shim . Shim sets for stainless steel Full-Flow Air Knives include (1) .002" (0.05mm) thick stainless steel shim.

Full-Flow Air Knife Performance with .002" (0.05mm) thick shim installed

| Pressure Supply | Air Consumption per Inch (25mm) |     | Velocity @ 6" (152mm) from target |        | Sound Level @ 3' (914mm) | Force per Inch (25mm) @ 6" (152mm) from target |     |     |
|-----------------|---------------------------------|-----|-----------------------------------|--------|--------------------------|--|-----|-----|
|                 | PSIG                            | BAR | SCFM                              | SLPM   | FPM                      | M/S  | dBA | Ozs |
| 20              | 1.4                             | 1.1 | 31                                | 3,000  | 15.2                     | 64   | 0.4 | 11  |
| 40              | 2.8                             | 1.8 | 51                                | 5,000  | 25.4                     | 72   | 1.0 | 28  |
| 60              | 4.1                             | 2.4 | 68                                | 7,500  | 38.1                     | 76   | 1.6 | 45  |
| 80              | 5.5                             | 3.1 | 88                                | 10,000 | 50.8                     | 80   | 2.3 | 65  |
| 100             | 6.9                             | 3.8 | 108                               | 12,000 | 61.0                     | 83   | 2.9 | 82  |

12" (305mm) Full-Flow Air Knife tested

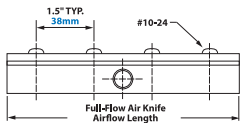
**?** Is the Full-Flow Air Knife best for your application?  
see page 23

# Full-Flow Air Knife

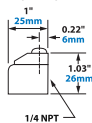


A series of Full-Flow Air Knives "float" layers of plastic film in this confined space of the machine.

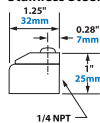
## Full-Flow Air Knife Dimensions



### Aluminum



### Stainless Steel



### Full-Flow Air Knife Only

| Airflow Length | Aluminum Model | Type 303SS Model |
|----------------|----------------|------------------|
| 3" (76mm)      | 2603           | 2603SS           |
| 6" (152mm)     | 2606           | 2606SS           |
| 9" (229mm)     | 2609           | 2609SS           |
| 12" (305mm)    | 2612           | 2612SS           |
| 18" (457mm)    | 2618           | 2618SS           |
| 24" (610mm)    | 2624           | 2624SS           |
| 30" (762mm)    | 2630           | 2630SS           |
| 36" (914mm)    | 2636           | 2636SS           |

### Full-Flow Air Knife Kits

Kits include a Full-Flow Air Knife, shim set, filter separator and pressure regulator (with coupler).

| Airflow Length | Aluminum Model | Type 303SS Model |
|----------------|----------------|------------------|
| 3" (76mm)      | 2803           | 2803SS           |
| 6" (152mm)     | 2806           | 2806SS           |
| 9" (229mm)     | 2809           | 2809SS           |
| 12" (305mm)    | 2812           | 2812SS           |
| 18" (457mm)    | 2818           | 2818SS           |
| 24" (610mm)    | 2824           | 2824SS           |
| 30" (762mm)    | 2830           | 2830SS           |
| 36" (914mm)    | 2836           | 2836SS           |

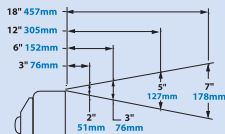
### Full-Flow Air Knife Shim Sets

Shim Sets include (1) each of a .001" (0.03mm), .003" (0.08mm) and .004" (0.10mm) plastic shim. Stainless Steel Shim Sets include (1) .002" (0.05mm) thick shim.

| Airflow Length | Aluminum Model | Type 303SS Model |
|----------------|----------------|------------------|
| 3" (76mm)      | 2803DX         | 2803SSDX         |
| 6" (152mm)     | 2806DX         | 2806SSDX         |
| 9" (229mm)     | 2809DX         | 2809SSDX         |
| 12" (305mm)    | 2812DX         | 2812SSDX         |
| 18" (457mm)    | 2818DX         | 2818SSDX         |
| 24" (610mm)    | 2824DX         | 2824SSDX         |
| 30" (762mm)    | 2830DX         | 2830SSDX         |
| 36" (914mm)    | 2836DX         | 2836SSDX         |

| Airflow Length | Aluminum Model | Type 303SS Model |
|----------------|----------------|------------------|
| 3" (76mm)      | 2903           | 2903SS           |
| 6" (152mm)     | 2906           | 2906SS           |
| 9" (229mm)     | 2909           | 2909SS           |
| 12" (305mm)    | 2912           | 2912SS           |
| 18" (457mm)    | 2918           | 2918SS           |
| 24" (610mm)    | 2924           | 2924SS           |
| 30" (762mm)    | 2930           | 2930SS           |
| 36" (914mm)    | 2936           | 2936SS           |

## Airflow Pattern



## Accessories

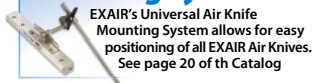
| Model # | Description   |
|---------|---|
| 9001    | Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM)    |
| 9032    | Auto Drain Filter Separator, 1/2 NPT, 90 SCFM (2,548 SLPM)    |
| 9002    | Auto Drain Filter Separator, 3/4 NPT, 220 SCFM (6,230 SLPM)   |
| 9005    | Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM)      |
| 9006    | Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,415-4,248 SLPM)   |
| 9008    | Pressure Regulator, 1/4 NPT, 50 SCFM (1,415 SLPM)             |
| 9033    | Pressure Regulator, 1/2 NPT, 100 SCFM (2,832 SLPM)            |
| 9009    | Pressure Regulator, 3/4 NPT, 220 SCFM (6,230 SLPM)            |
| 9020    | Solenoid Valve, 120V, 50/60Hz, 1/4 NPT, 40 SCFM (1,133 SLPM)  |
| 9034    | Solenoid Valve, 120V, 50/60Hz, 1/2 NPT, 100 SCFM (2,832 SLPM) |
| 9036    | Solenoid Valve, 120V, 50/60Hz, 3/4 NPT, 200 SCFM (5,664 SLPM) |
| 9065    | Solenoid Valve, 24VDC, 50/60Hz, 1 NPT, 350 SCFM (9,911 SLPM)  |

### Special length

Full-Flow Air Knives and unlimited system lengths are available. Magnetic bases with Stay Set™ flexible hoses are also available for smaller Full-Flow Air Knives. Please contact our factory.

Inlets on each end are available at a small charge. This is not recommended if uniform flow is desired. Please contact one of our Application Engineers for details.

## Universal Air Knife Mounting System



EXAIR's Universal Air Knife Mounting System allows for easy positioning of all EXAIR Air Knives. See page 20 of the Catalog



Order EXAIR's EFC™ electronic flow control to minimize compressed air use. See below details.