

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 19 for complete details on the Universal Air Knife Mounting System. The Full-Flow Air Knife can 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" (.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), .003" (0.08mm) and .004" (0.10mm) thick plastic shim. Shim sets for stainless steel Full-Flow Air Knives include (1) .002" (0.05mm) thick stainless steel shim.



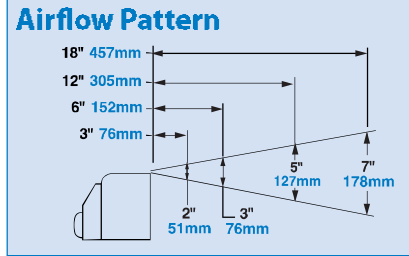
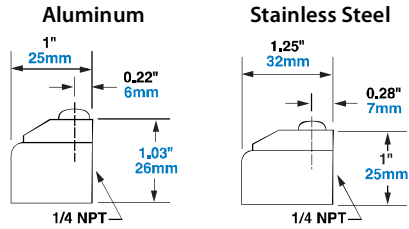
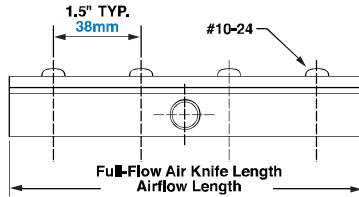
Full-Flow Air Knife Performance with .002" (0.05mm) thick shim installed

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	Grams
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) Super Air Knife tested

Full-Flow Air Knife

Full-Flow Air Knife Dimensions



Aluminum Full-Flow Air Knife Only		
Model #	2603	
Airflow Length	3" (76 mm)	
2606	2609	2612
6" (152 mm)	9" (229 mm)	12" (305 mm)
2618	2624	2630
18" (457 mm)	24" (610 mm)	30" (762 mm)
2636		
36" (914 mm)		

Stainless Steel Full-Flow Air Knife Only		
Model #	2603SS	
Airflow Length	3" (76 mm)	
2606SS	2609SS	2612SS
6" (152 mm)	9" (229 mm)	12" (305 mm)
2618SS	2624SS	2630SS
18" (457 mm)	24" (610 mm)	30" (762 mm)
2636SS		
36" (914 mm)		

Accessories	
Model #	Description
9001	Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1841 SLPM)
9032	Auto Drain Filter Separator, 1/2 NPT, 90 SCFM (2548 SLPM)
9002	Auto Drain Filter Separator, 3/4 NPT, 220 SCFM (6230 SLPM)
9005	Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1048 SLPM)
9006	Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1415-4248 SLPM)
9008	Pressure Regulator, 1/4 NPT, 50 SCFM (1416 SLPM)
9033	Pressure Regulator, 1/2 NPT, 100 SCFM (2832 SLPM)
9009	Pressure Regulator, 3/4 NPT, 220 SCFM (6230 SLPM)
9020	Solenoid Valve, 120V, 50/60Hz, 1/4 NPT, 40 SCFM (1133 SLPM)
9034	Solenoid Valve, 120V, 50/60Hz, 1/2 NPT, 100 SCFM (2832 SLPM)
9036	Solenoid Valve, 120V, 50/60Hz, 3/4 NPT, 200 SCFM (5664 SLPM)
9065	Solenoid Valve, 24VDC, 50/60Hz, 1 NPT, 350 SCFM (9911 SLPM)

Aluminum Full-Flow Air Knife Kits		
Kits include an Aluminum Full-Flow Air Knife, shim set, filter separator and pressure regulator (with coupler).		
Model #	2803	
Airflow Length	3" (76 mm)	
2806	2809	2812
6" (152 mm)	9" (229 mm)	12" (305 mm)
2818	2824	2830
18" (457 mm)	24" (610 mm)	30" (762 mm)
2836		
36" (914 mm)		

Stainless Steel Full-Flow Air Knife Kits		
Kits include a Stainless Steel Full-Flow Air Knife, shim set, filter separator and pressure regulator (with coupler).		
Model #	2803SS	
Airflow Length	3" (76 mm)	
2806SS	2809SS	2812SS
6" (152 mm)	9" (229 mm)	12" (305 mm)
2818SS	2824SS	2830SS
18" (457 mm)	24" (610 mm)	30" (762 mm)
2836SS		
36" (914 mm)		

Deluxe Aluminum Full-Flow Air Knife Kits		
Kits include an Aluminum Full-Flow Air Knife, EFC, Universal Mounting System, shim set, filter separator and pressure regulator (with coupler).		
Model #	2803DX	
Airflow Length	3" (76 mm)	
2806DX	2809DX	2812DX
6" (152 mm)	9" (229 mm)	12" (305 mm)
2818DX	2824DX	2830DX
18" (457 mm)	24" (610 mm)	30" (762 mm)
2836DX		
36" (914 mm)		

Deluxe Stainless Steel Full-Flow Air Knife Kits		
Kits include a Stainless Steel Full-Flow Air Knife, EFC, Universal Mounting System, shim set, filter separator and pressure regulator (with coupler).		
Model #	2803SSDX	
Airflow Length	3" (76 mm)	
2806SSDX	2809SSDX	2812SSDX
6" (152 mm)	9" (229 mm)	12" (305 mm)
2818SSDX	2824SSDX	2830SSDX
18" (457 mm)	24" (610 mm)	30" (762 mm)
2836SSDX		
36" (914 mm)		

Aluminum Full-Flow Air Knife Shim Sets		
Shim Sets include (1) each of a .001" (0.03mm), .003" (0.08mm) and .004" (0.10mm) thick plastic shim.		
Model #	2903	
Airflow Length	3" (76 mm)	
2906	2909	2912
6" (152 mm)	9" (229 mm)	12" (305 mm)
2918	2924	2930
18" (457 mm)	24" (610 mm)	30" (762 mm)
2936		
36" (914 mm)		

Stainless Steel Full-Flow Air Knife Shim Sets		
Shim Sets include (1) .002" (0.05mm) thick stainless steel shim.		
Model #	2903SS	
Airflow Length	3" (76 mm)	
2906SS	2909SS	2912SS
6" (152 mm)	9" (229 mm)	12" (305 mm)
2918SS	2924SS	2930SS
18" (457 mm)	24" (610 mm)	30" (762 mm)
2936SS		
36" (914 mm)		

Special length F.F. Air Knives and unlimited system lengths are available. Magnetic bases with Stay Set™ flexible hoses are also available for smaller F.F. 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.

Universal Air Knife Mounting System

EXAIR's Universal Air Knife Mounting System allows easy positioning of all EXAIR Air Knives. See page 19 for details.

Need A Control?

EXAIR's EFC is an electronic flow control that limits compressed air use. See page 3 for details.