

# ACCESSORIES

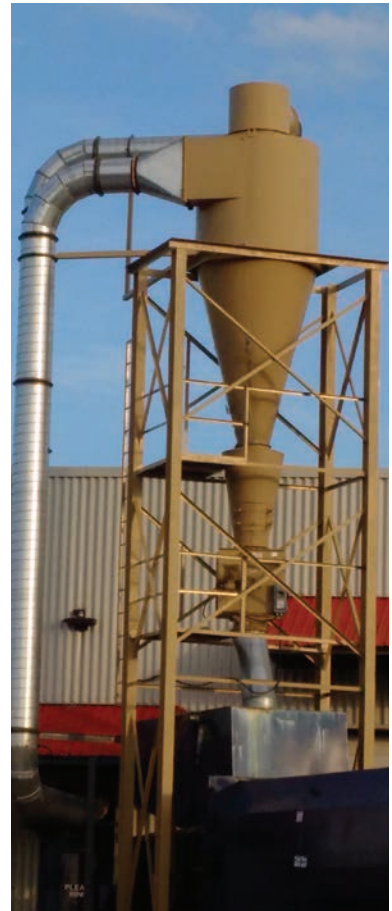


**N.R. MURPHY LTD.**  
**DUST COLLECTORS**

# CYCLONES

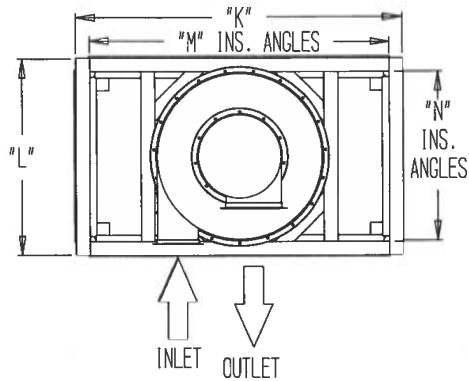
The cyclone dust collector provides a simple and economical solution to most medium to coarse dust collection applications. The centrifugal action along with gravitational forces push dust particles through the bottom into storage and clean air through the top. The construction design of N.R. Murphy's cyclone dust collectors is very rugged, featuring a heavy gauge wiped galvanized all welded construction. Generally shipped preassembled at the factory to allow for quick on-site installation.

Cyclones can be used as stand alone air material separators or in conjunction with a dust collector. They can also be used as primary separators to provide classification or sizing of material. Available in a wide range of sizes, and can be fabricated from a variety of materials to meet any application's need.



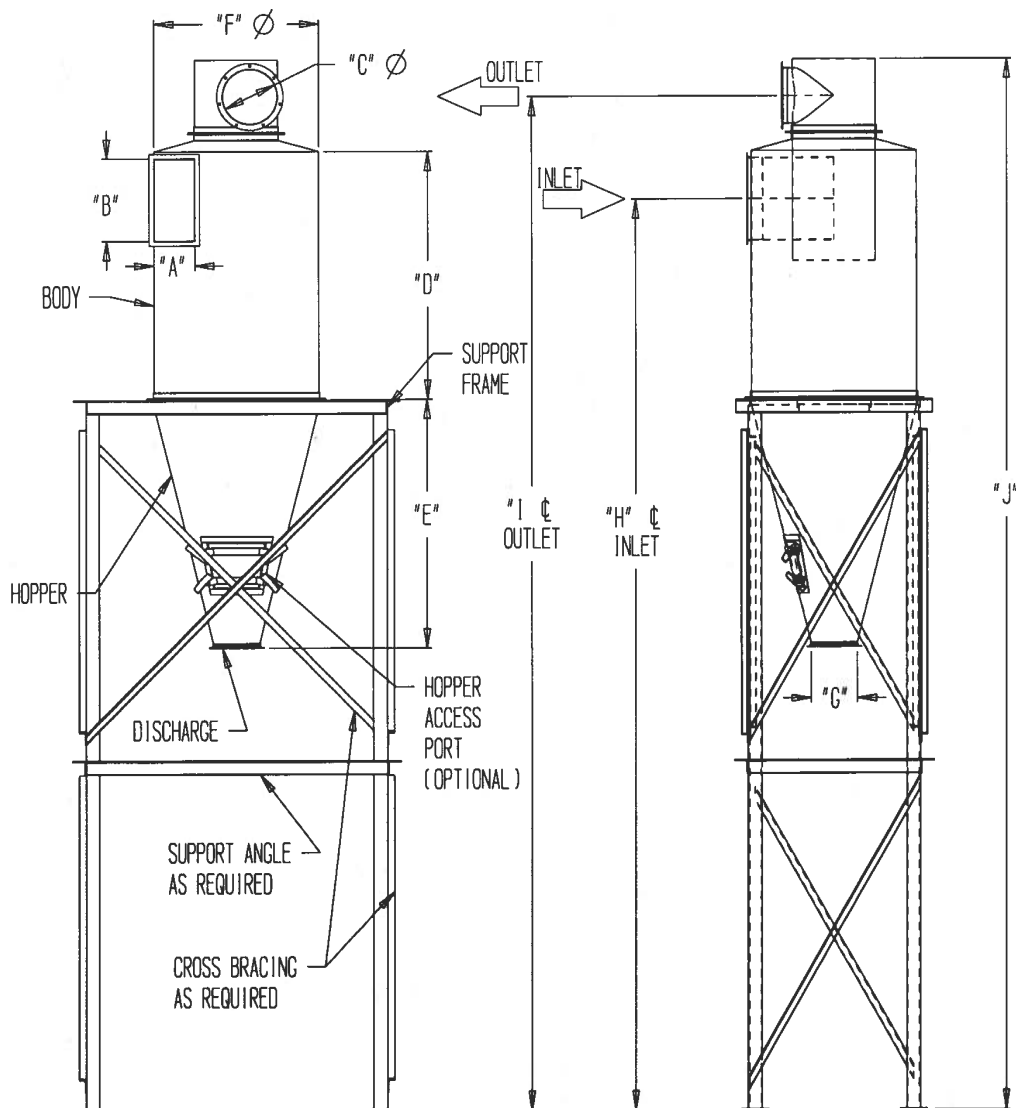
Check EA-1 exhaust fan performance charts for required C.F.M. and resistance in N.R. Murphy Ltd.'s exhaust fan catalogue.  
NOTE: The C.F.M. mentioned in charts are a guide only. Please check with factory. Normal pressure drop allowance across units is 3" SP. N.R. Murphy Ltd. reserves the right to make changes to the information presented, product changes, and correct typographical errors without notice.

# CYCLONES

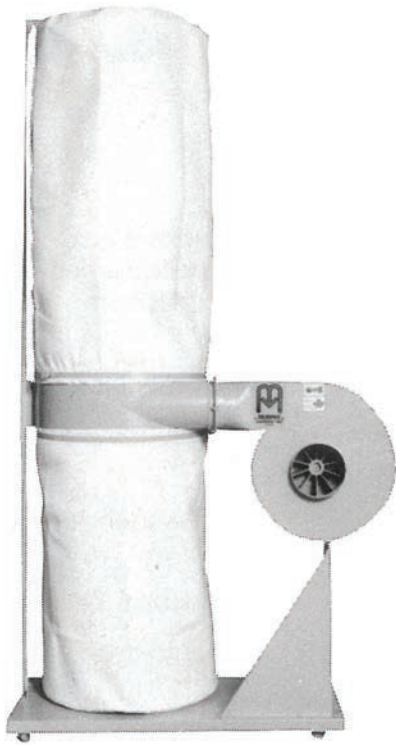


## NOTES:

- A: STANDARD BODY SHOWN.  
SPIRAL TOP BODY CAN ALSO BE QUOTED  
AND BUILT
- B: SUPPORT FRAME OPTIONAL  
DESIGNED TO CUSTOMER REQUIREMENTS
- C: TRANSITION CONNECTIONS OPTIONAL  
FOR INLETS AND OUTLETS
- D: HOPPER DISCHARGE QUOTED TO  
CUSTOMER REQUIREMENTS



# M.R.X.



**Motor - 2 H.P. - 3/60/575, 3/60/230/460, 3/60/208**

**Fan - Inlet - 5" diameter**

**The M.R.X.-5 delivers 771 C.F.M. @ 5650 F.P.M.**

**Ceiling Height Required - 8 feet**

**Approximate shipping weight:**

**2 bag unit - 250 lbs**

**4 bag unit - 300 lbs**



**Motor - 3 H.P. - 3/60/575, 3/60/230/460, 3/60/208**

**Fan - Inlet - 7" diameter**

**The M.R.X.-5 delivers 1443 C.F.M. @ 5400 F.P.M.**

**Ceiling Height Required - 8 feet**

**Approximate shipping weight:**

**2 bag unit - 300 lbs**

**4 bag unit - 350 lbs**

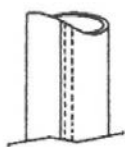
## **Features:**

- Portable on heavy duty casters.
- Polyester needlefelt filters.
- Quick and easy to assemble and install.
- Cleaned air returned to plant.
- Compact, lightweight and occupies minimal floor space.
- Ideal for connecting to machines in remote locations.
- Ideally suited for areas with low headroom.

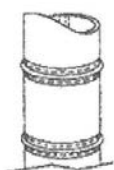


# FILTER BAGS

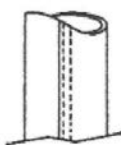
N.R. Murphy Limited manufactures our own filter bags, as well as for other manufacturer's equipment. We use and stock first quality filter media so that our Engineering staff may select the filter media most appropriate for your dust application. It is imperative that new filter bags are made from the correct media and are installed correctly to avoid dust leaking past the filters and into the facility. There are many variables that will affect the frequency of your filter change outs, such as the number of shifts you are running and most importantly the type and properties of the material being collected and general plant conditions. See our wide variety of bag styles:



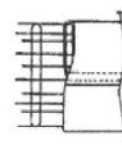
**Tubular Unsupported**  
Internal Dust Cake  
Used primarily in Shaker or Reverse Air Collectors.



**Tubular Anti-Collapse Rings**  
Internal Dust Cake  
Used in Reverse Air Collectors.



**Tubular Internal Support Cage**  
External Dust Cake  
Used in Pulse-Jet Collectors.



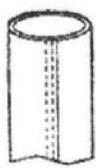
**Envelope Internal Support Cage**  
External Dust Cake  
Used in Shaker & Pulse-Jet Collectors.

## Top and Bottom Configurations:

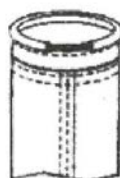
There is a variety of methods for attaching filter bags to the collector at both the top and bottom. Bags are available with all of the following connection designs. Other configurations are available for less common equipment.



**Snap Band**  
Used in Pulse-Jet Collectors and Shaker Designs.



**Plain**  
Used in Pulse-Jet Collectors and Shaker Designs.



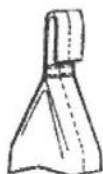
**Open Corded**  
With a disposable top, used in Shaker and Reverse Air Collectors.



**Double Beaded Seal**  
Used in Shaker and Reverse Air Collectors.



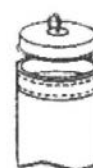
**Flanged**  
Used in Pulse-Jet Collectors.



**Strap**  
Used in Shaker and Reverse Air Collectors.



**Loop**  
Used in Shaker and Reverse Air Collectors.



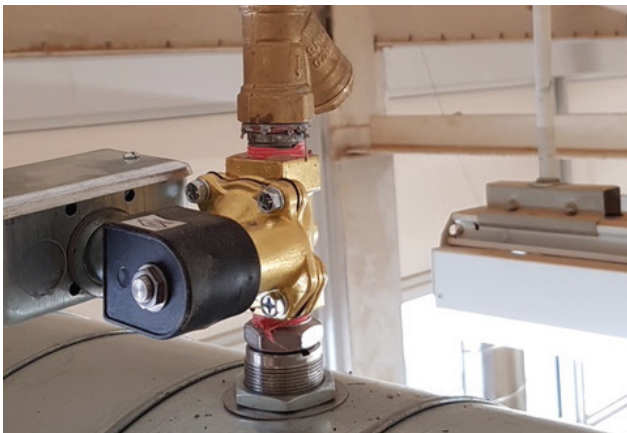
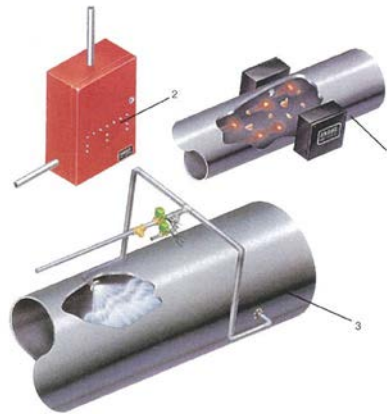
**Compression Band**  
With a disposable top. Used in Shaker and Reverse Air Collectors.

← THIS DIMENSION REPRESENTS THE DIAMETER OF A HUMAN HAIR, 100 MICRONS →  
1 MICRON = 1 MICROMETER = 1 MILLIONTH OF A METER

N.R. Murphy Limited filters capture 99.9% plus on particles sizes 1 Micron or larger

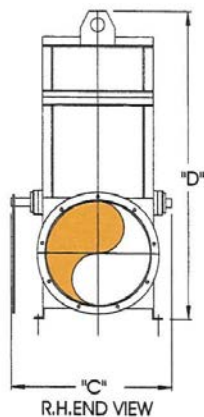
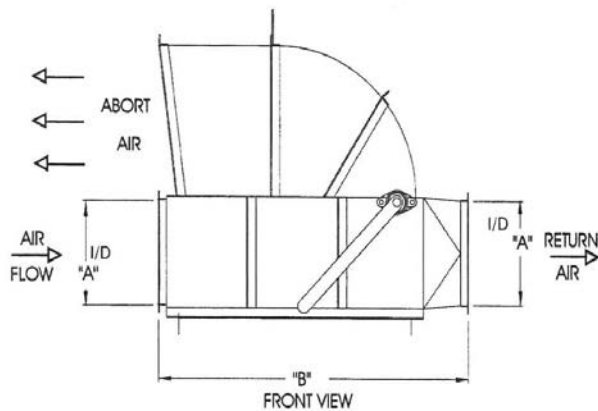
# SPARK DETECTION SYSTEMS

All components are specifically designed and engineered to protect wood working dust collecting systems from catastrophic fires. The immediate spark detection and instantaneous discharge of water assures unsurpassed fire protection without the need to shut down the entire filter system. It starts with infrared detectors continually scanning all particles in the duct as it searches for a spark. When a spark passes the detector, it sends a signal to the control panel, which simultaneously activates the water spray solenoid valve. The water sprays the duct within milliseconds after the spark is detected. The water spray solenoid valve continues to operate for a pre-programmed number of seconds after each spark passes the detector. This ensures that all sparks in the duct are drawn through the water curtain and extinguished. The valve then automatically closes to prevent excessive water build up in the ducts.



# ABORT DAMPERS

The N.R. Murphy Limited Abort Damper, when installed in the return air line of a dust collection system, is an instant aborting device which bypasses the return air to atmosphere when activated by a properly installed and maintained fire or spark detection and extinguishing system. Fabricated from heavy gauge reinforced steel, this accessory is designed to enhance the safety and protection of both your employees and your manufacturing facility. The Abort Dampers can also be actuated in the summer months to allow the cleaned air to exhaust to atmosphere when windows and doors can remain open (NOTE: the damper should be manually actuated and reset only when the exhaust system has been turned off). Available in a wide variety of sizes and configurations.



A - Size	B - Length (in)	C - Width (in)	D - Height (in)	Weight (lbs)
11	43	20 1/2	37 3/4	195
13	47	22 1/2	41 3/4	240
15	50	24 1/2	44 3/4	290
17	54	26 1/2	49 1/4	350
19	57	26 1/4	51 1/4	425
21	62	28 1/4	57 1/4	480
23	67	30 1/4	61 1/4	545
26	74	35 1/4	66 1/4	710
29	81	38 1/4	72 1/4	825
33	91	42 1/4	80 1/4	1010
38	97	47 1/4	89 1/4	1150
42	104	51 1/4	97 1/4	1350
46	110	55 1/4	105 1/4	1480
48	107	58 1/2	111 1/4	1545



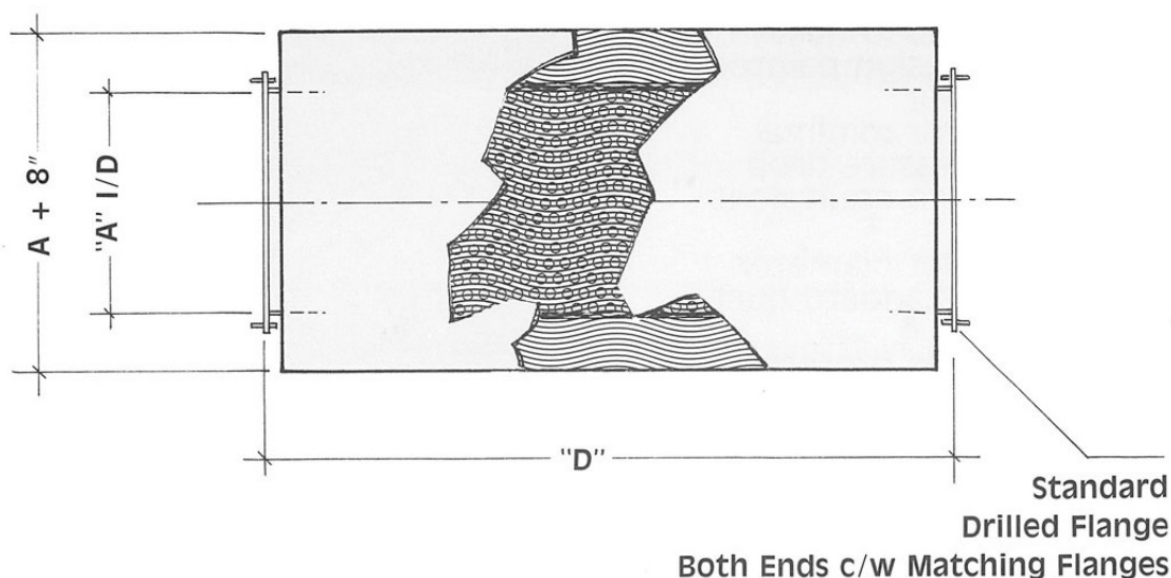
# SILENCERS

N.R. Murphy Ltd.'s Duct Silencers are made from an all welded, heavy gauge steel design that helps reduce noise within your ducting system. Silencing media is protected by a perforated metal to minimize erosion. The inlet and outlet diameter are sized to suit standard duct sizes, and comes with matching flange connections.

Available in a wide variety of other shapes and sizes, as well as fabricated from speciality metals, if required. Ask us about our wide variety of other products that can help reduce the noise levels of your dust collection system!



Size Inside Dia.	Octave Band Mid Frequencies - dB							
	63	125	250	500	1000	2000	4000	8000
7	2	2	9	13	18	16	13	10
11	2	3	12	20	22	19	13	11
23	3	8	17	27	22	11	10	8
33	5	11	22	25	16	10	9	7

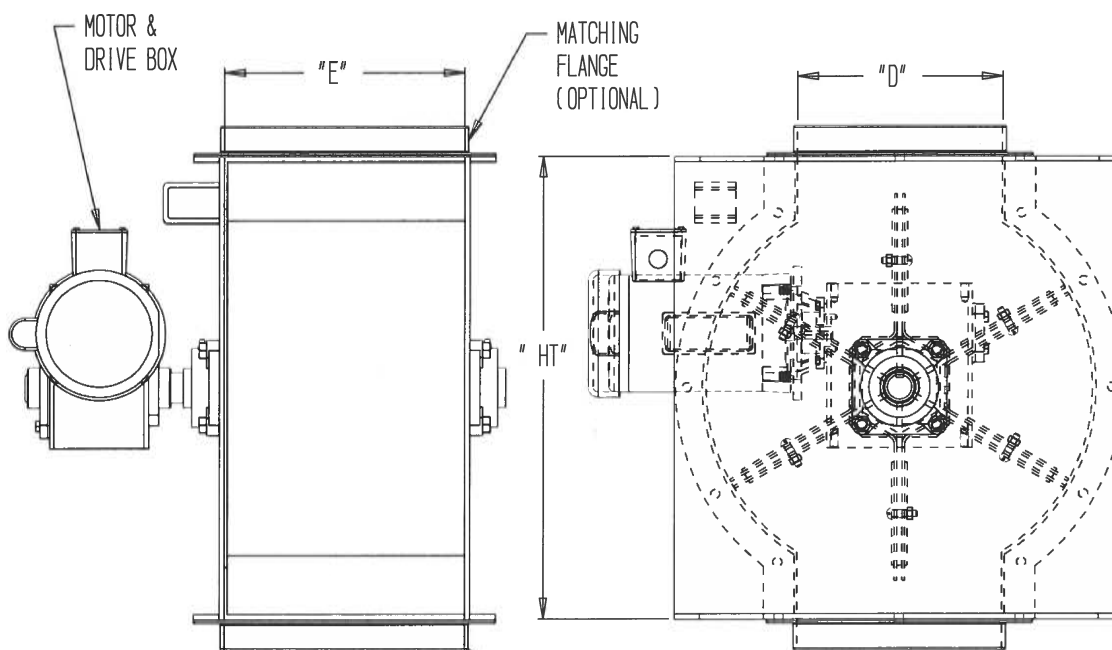


Size "A" Dim.	7"	8"	9"	10"	11"	13"	15"	17"	19"	21"	23"	26"	29"	33"
"D" Dim.	23"	26"	29"	32"	35"	41 1/2"	47 1/2"	54"	60"	66"	72"	81"	90"	102"



# ROTARY AIR LOCKS

N.R. Murphy's Rotary Air Lock combines craftsmanship with trouble free efficient design to run all day long while continuously discharging waste. The Air Locks are used to provide an airtight seal on cyclones, dust collectors, storage bins, enclosed mechanical conveyors, etc. Featuring a heavy gauge all welded construction and made with a sturdy six blade rotor with replaceable full pocket, double wiper neoprene seals. Our standard design comes with a removable side plate for easy access to replaceable seals, and a T.E.F.C. motor. Special metals and/or seals are available for high temperatures, corrosiveness or product contamination. We also provide air locks that meet various safety codes, ask us for assistance!



Model Number	Height			Inlet & Outlet Size		Motor H.P.	Cu. ft. per Min	Revolutions per minute	Approx. Total Weight
	A	B	C	D	E				
Size 1	22 1/2"	23 1/2"	24 1/2"	10"	11 3/4"	3/4	11.62	28.7	300
Size 2	34"	34"	31"	16"	17 3/4"	1 1/2"	36.47	19.3	775
Size 3	43 1/4"	44 1/2"	38 1/2"	20"	21 3/4"	2	57.91	14.3	1250

# NO RETURN VALVE/VIGIFLAP

N.R. Murphy Ltd. distributes a wide variety of ATEX certified dust collection accessories, including the No Return Valve and VigiFLAP. Both of these accessories are designed to protect workers and facilities from the damaging effect of a dust collector or filter explosion. By utilizing a counter-weighted valve flap and a locking mechanism, the device will not only block the ducting to stop the pressure, but also signal to the collector to turn off. The No Return Valve features a heavy duty welded steel construction, with a flanged inlet/outlet (plus matching co-flanges), plus an inspection/access door for maintenance.



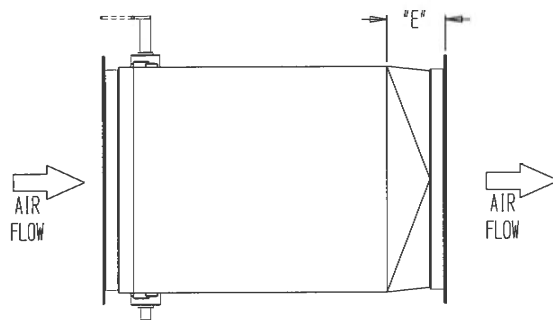
The VigiFLAP is similar to a No Return Valve, but is much more flexible in its application as it can be installed in either a horizontal or vertical position. Available in diameters from 6" up to 52". Both devices come with a micro-switch for system shutdown, a dust level sensor, and a separate control panel. Both these products are essential to an NFPA compliant dust collection system, and can be paired with other ATEX certified devices and accessories.





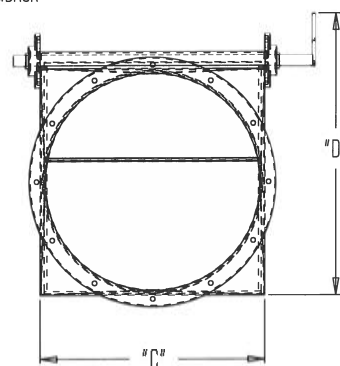
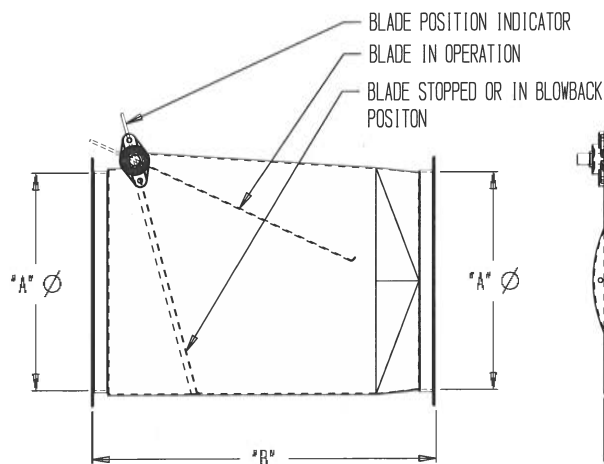
# INLET BLOWBACK DAMPER

N.R. Murphy's Inlet Blowback Damper provides the same functionality as the No Return Valve but does not comply with some standards. The device is installed on the inlet section of the ducting to prevent explosion and pressure waves from reaching the manufacturing facility and the employees. Available with a locking mechanism and sensor to alert the collector of an explosion to force shutdown.



NOTES:  
STANDARD UNIT SHOWN

FOR ROUND TO SQUARE  
REMOVE TRANSITION AND  
ADD SQ FLANGE



# ACCESSORIES

## DOWNDRAFT TABLE

N.R. Murphy Ltd. manufactures downdraft tables and workbenches to ensure a clean working area. Available with outlets to be tied into a new or existing dust collection system. Beneficial for capturing dust before it reaches the worker's breathing zones. Available in a wide variety of arrangements, sizes and materials.



## EXPLOSION VENTS

N.R. Murphy Ltd. distributes a wide variety of types, sizes and accessories for explosion venting. These vents help evacuate pressure, flames, and dusts to a designated space away from people and equipment. Available with deflector plates and sensors for added features.

## FLAMELESS EXPLOSION VENT

If standard explosion vents don't meet your safety requirements, N.R. Murphy Ltd. also offer a flameless explosion vent. This device adds protection to prevent flames from entering the environment. Most useful in high density, high traffic areas.







## Fire Damper

N.R. Murphy Ltd. distributes a wide variety of types and sizes of fire dampers. When a high temperature is reached in the ducting, the tag breaks and the curtain slams shut - hence restricting the fire's advancement.

## CARTRIDGE FILTERS

N.R. Murphy Ltd. stocks and sources a large variety of different cartridge filters for your small particle dust application.



## Two-way Diverter

N.R. Murphy Ltd. manufactures a wide variety of diverters to be used within a material handling system. Available with a pneumatic cylinder system for ease of switching.

# ACCESSORIES

## SQUARE TO ROUND

N.R. Murphy Ltd. manufactures custom square to round transition flanged pieces.



## Angle Rings

N.R. Murphy Ltd. manufactures and stocks a wide variety of angle ring sizes. Standard rings are black iron, unpainted, welded, leg out design.

## Flexible Duct (Hose)

Available in a variety of stocked sizes, including from 3" to 8", plus 10" and 20".





## Blast Gates

N.R. Murphy Ltd. stocks a wide variety of full collar and half collar blast gates. Generally carry sizes from 3" up to 10", and larger.

## Ball Joints

Available in a variety of sizes.



## Cleanout Doors

Available in a variety of sizes to fit your custom needs.



# Contact Us



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**More Experience**  
**More Quality**  
**More Value**

