

FIBERGLASS
ROUND AND RECTANGULAR

VI-A-TROL®

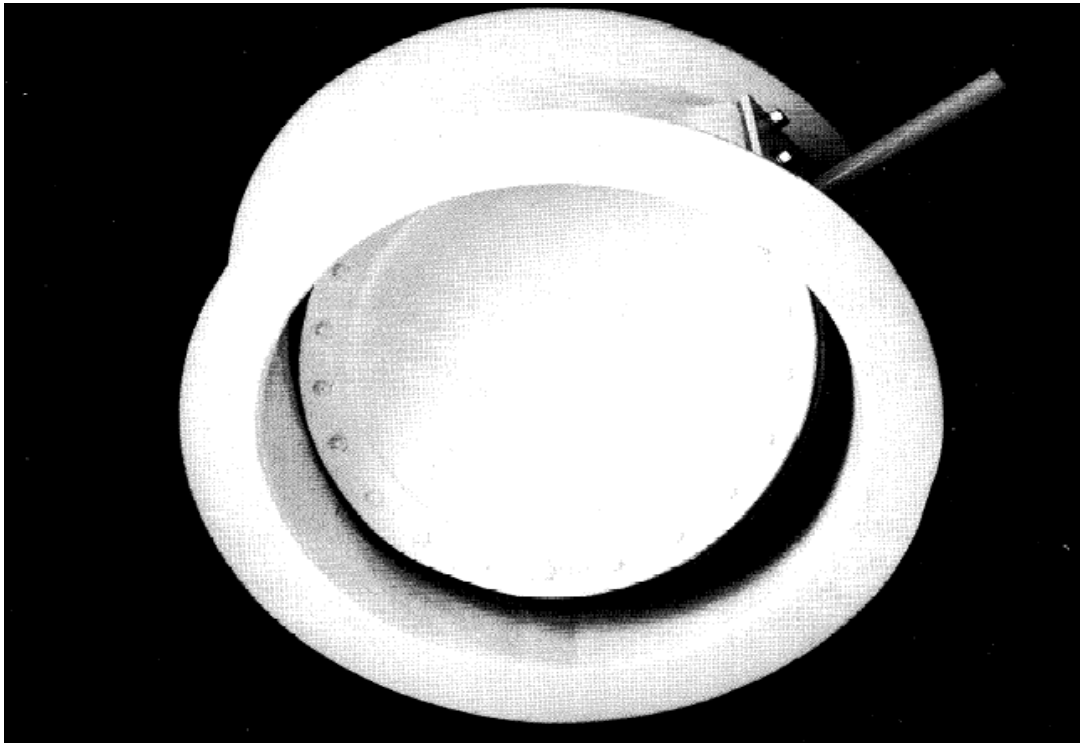
CONTROL DAMPERS



VIRON®

**INTERNATIONAL
CORPORATION**

FIBERGLASS CONTROL DAMPERS



VIRON® INTERNATIONAL CORPORATION is a leading manufacturer of corrosion resistant FIBERGLASS Control Dampers with over thirty-five years of fabrication experience. **VIRON's** modern facilities in Michigan and Texas operate the most efficient equipment and manpower found in the thermoset plastic damper business. Each Control Damper has been tested in accordance to AMCA Publication 500.

VIRON® VCD Series Control Dampers are designed to operate in corrosive fume environments from industrial and institutional facilities where production, research, product development, and medical work is done. This heavy duty air Control Damper is ideal for use in hospitals, university research buildings, R & D facilities, chemical plants, pharmaceutical production, metal finishing, waste water treatment plants, and semiconductor facilities.

STANDARD DESIGN PARAMETERS:

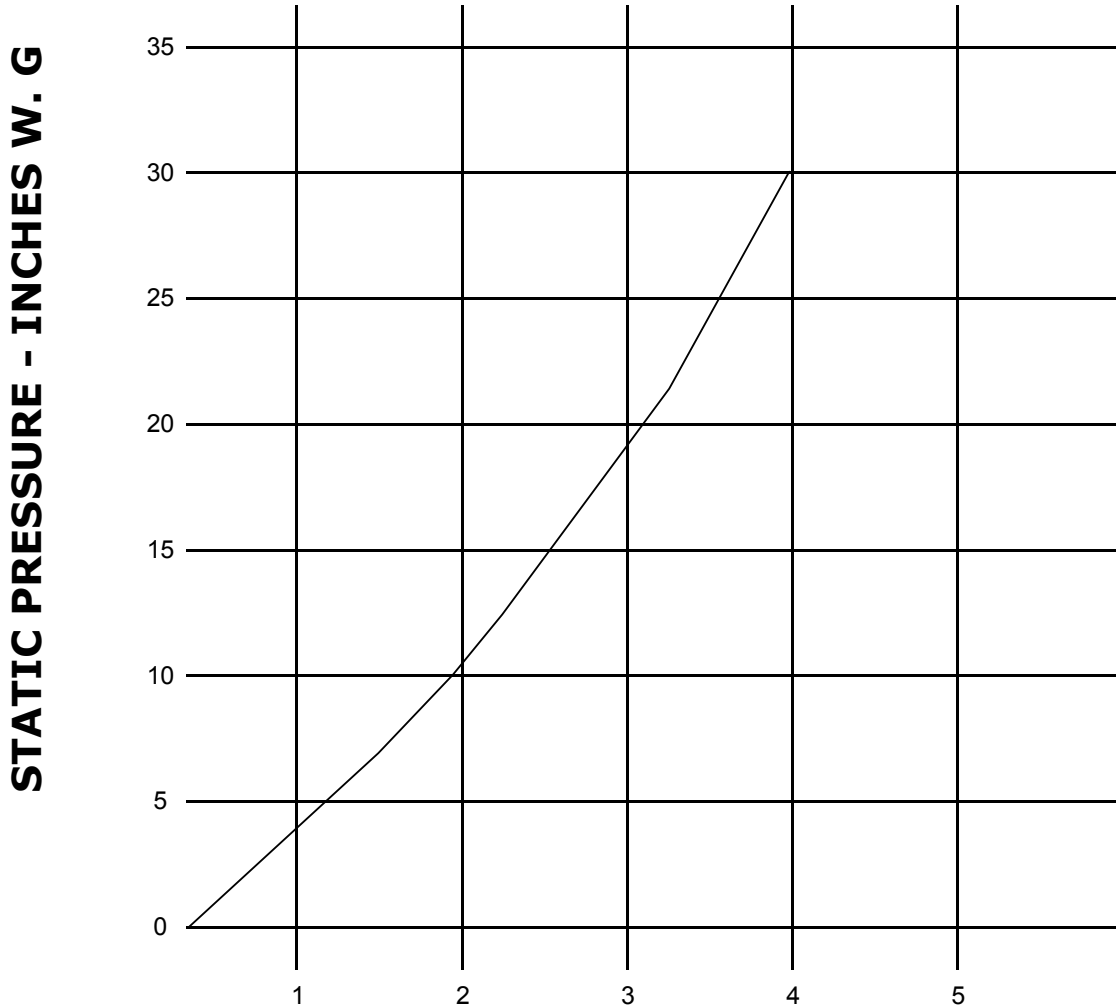
1. High Efficiency
2. Easy Maintenance
3. Minimum Operating Cost
4. Structural Integrity
5. Low Leakage



VIRON® INTERNATIONAL CORPORATION certifies that the "**VIRON®** VCD Series Control Dampers" shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air leakage ratings only.

VIRON[®] VCD SERIES CONTROL DAMPERS

CFM LEAKAGE PERFORMANCE WITH OPTIONAL BLADE SEALS



LEAKAGE CFM PER SQUARE FOOT AREA

PLEASE NOTE:

- 1) Air leakage is based on an operating temperature between 50°F and 104°F.
- 2) An airflow leakage rate of 4 CFM/ft.2 was attained at 30 in. wg. At a seating torque of 56.60 lb-ft/ft2 face area for a 72" diameter damper, applied to hold the damper in a closed position.
- 3) Air leakage is shown for both pressure in direction of flow and for back pressure.
- 4) Consult factory for sound test data.

SPECIFICATION FOR FIBERGLASS CONTROL DAMPERS

VIRON® VI-A-TROL™ SERIES

Provide round and rectangular control dampers as shown on the contract drawings. All damper housings and flanges shall be manufactured per NBS PS 15-69 with a minimum interior resin rich veil thickness of 30 mils. The penetrations in the damper housing shall have molded PTFE bearings to support the axle. All exterior surfaces of the damper housing shall be finished with VIRON® Beige gel coat for ultraviolet protection.

The damper shall have a maximum leakage of 4 cfm per square foot at 30" W.G. when equipped with optional blade seals. All dampers shall be licensed to bear the AMCA seal. The published leakage rate shall be based on tests and procedures performed in accordance with AMCA publication 500. Dampers not bearing the AMCA seal are unacceptable. The maximum blade deflection at 30" W. G. shall be 1/180th of the blade's span.

VI-A-TROL® Damper flanges are an integral part of the damper housing. Flanges applied by secondary bonding are not acceptable.

The fiberglass shaft shall be provided in full length from pultruded stock. The shaft shall be manufactured from a premium grade vinylester resin suitable for the installation environment.

Applicable ASTM Specifications:

Damper Housing	ASTM D2584-68	Ignition loss of Cure Reinforced Resins
Damper Shaft	ASTM D4385-84a	Classifying Visual Defects in Thermosetting Reinforced Plastic Protruded Products
FRP Duct	ASTM D3982-92	Contact Molded "Fiberglass" (Glass Fiber Reinforced Thermosetting Resin) Duct and Hoods

Product Standard:

FRP Duct	NBS PS15-69	Custom Contact - Molded Reinforced Polyester Chemical Resistant Process Equipment
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AMCA Standards:

Air Leakage	AMCA 500-89	Test Methods for Louvers, Dampers and Shutters
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FIBERGLASS CORROSION TABLE

This table may be used as a guide for ventilating gases and vapors from processes where chemicals shown are used.
Maximum temperatures shown.

ENVIRONMENT	°F	ENVIRONMENT	°F	ENVIRONMENT	°F
ACIDS		GASES (cont'd.)		SALTS (cont'd.)	
Acetic to 10%	200	Hydrogen Fluoride , Wet	150	Potassium Permanganate	80
Acetic to 50%	150	Hydrogen Sulfide	200	Potassium Persulfate	140
Acrylic	100	Sulfur Dioxide, Dry	200	Potassium Sulfate	200
Benzene Sulfonic to 25%	170	Sulfur Dioxide, Wet	170	Silver Nitrate	170
Benzene Sulfonic 25% up	80	Sulfur Trioxide, Dry	120	Sodium Acetate	200
Benzoic	200	Sulfur Trioxide, Wet	120	Sodium Bisulfate	200
Boric	200			Sodium Chloride	200
Butyric to 50%	200	ALKALIES		Sodium Chlorite	200
Butyric 50% up	80	Ammonium Bocarbonate	150	Sodium Cyanide	170
Carbonic	200	Ammonium Carbonate	120	Sodium Dichromate	200
Chloracetic to 25%	170	Ammonium Hydroxide to 5%	150	Sodium Ferricyanide	150
Chloracetic 25% to 50%	150	Ammonium Hydroxide to 10%	120	Sodium Fluoride	200
Chromic to 5%	120	Ammonium Hydroxide to 29%	80	Sodium Nitrate	200
Chromic 5% up	N.R.	Aqueous Ammonia to 5%	150	Sodium Nitrite	150
Citric	200	Barium Carbonate	200	sodium Silicate pH Less Than 12	200
Fluoroboric	S 170	Barium Hydroxide to 10%	140	Sodium Sulfate	170
Fluorosilicic up to 32%	S 90	Calcium Hydroxide	170	Sodium Sulfite	200
Formic	F 200	Magnesium Carbonate	200	Stannic Chloride	200
Gluconic to 50%	170	Potassium Bicarbonate	170	Stannous Chloride	200
Hydrobromic to 50%	150	Potassium Carbonate	150	Zinc Chloride	200
Hydrochloric to 15%	*200	Potassium Hydroxide to 50%	120	Zinc Nitrate	170
Hydrochloric to 37%	*150	Sodium Bicarbonate	170	Zinc Sulfite	
Hydrochloric	*F 200	Sodium Carbonate to 35%	150		
Hydrocyanic to 10%	150	Sodium Hydroxide to 10%	N.R.	SOLVENTS	
Hydrofluoric to 10%	S 150	Sodium Hydroxide to 50%	N.R.	Acetone to 10%	F 180
Hydrofluorosilicic up to 30%	140	Sodium Sulfide	150	Benzene	80
Hypochlorous to 20%	170	Trisodium Phosphate	140	Carbon Disulfide	80
Lactic	200			Carbon Tetrachloride	F 140
Maleic	170	SALTS		Chlorobenzene	N. R.
Nitric to 5%	150	Aluminum Chloride	200	Ethyl Acetate	F 100
Nitric above 5%	N.R.	Aluminum Potassium Sulfate	200	Ethyl Chloride	F 90
Nitric (vapor)	F 150	Aluminum Sulfate	200	Ethylene Dibromide	100
Nitrous to 10%	150	Ammonium Chloride	200	Ethylene Glycol	200
Oleic	200	Ammonium Nitrate	200	n-Heptane	200
Oxalic	200	Ammonium Persulfate to 25%	170	Hexane	140
Perchloric	F 150	Ammonium Persulfate , saturated	150	Methyl Ethyl Ketone	80
Phosphoric	170	Ammonium Sulfate	200	Naphtha	200
Phosphoric, super	150	Aniline Sulfate to 25%	200	Naphthalene	200
Phosphoric (vapor)	F 200	Aniline Sulfate, saturated	170	Tetrachloroethylene	80
Phthalic	200	Antimony Trichloride	170	Toluene	80
Picric to 10%	80	Barium Chloride	200	Xylene	80
Silicic	200	Barium Sulfide	170		
Stearic	200	Calcium Chlorate	200	BLEACHES	200
Sulfamic, (see Benzene Sulfonic up to 25%)	190	Calcium Chloride	200	Calcium Chlorate	200
Sulfamic, (see Benzene Sulfonic up to 25%)	170	Calcium Sulfate	200	Calcium Hypochlorite	170
Sulfuric to 25%	190	Copper Chloride	200	Chlorine Dioxide up to 15%	170
Sulfuric to 50%	140	Copper Cyanide	200	Chlorine Water	120
Sulfuric to 70%	80	Copper Fluoride	150	Hydrogen Peroxide to 10%	80
Sulfuric to 98% (Oleum)	N.R.	Copper Oxychloride	150	Hydrogen Peroxide to 30%	120
Sulfurous to 10%	170	Copper Sulfate	200	Sodium Chlorate	F 170
Tannic	200	Ferric Chloride	200	Sodium Hypochlorite	
Tartaric	200	Ferric Nitrate	170		
Trichloroacetic to 50%	170	Ferric Sulfate	200	OTHERS	
		Ferrous Chloride	200	Aluminum Chlorohydroxide	200
ALCOHOLS		Ferrous Nitrate	200	Ammonium Phosphate	200
Amyl	170	Ferrous Sulfate	200	Aqua Regia	F 80
Benzyl	100	Lead Acetate	200	Detergents	150
Butyl	140	Magnesium Chloride	200	Glycerine	200
Ethyl	80	Magnesium Hydroxide	170	Kerosene	200
Methyl	80	Magnesium Sulfate	200	Photographic Solutions	90
		Mercuric Chloride	200	Perchloroethylene	80
GASES AND VAPORS		Mercurous Chloride	200	Sodium Tetraborate	200
Ammonia, Dry	170	Nickel Chloride	200	Sodium Tripolyphosphate	200
Ammonia, Wet	150	Nickel Nitrate	200	Sodium Xylene Sulfonate	150
Bromine	100	Nickel Sulfate	200	Sorbitol Solution	200
Carbon Dioxide	200	Potassium Chloride	200	Urea	140
Carbon Monoxide	200	Potassium Dichromate	170	Urea-Ammonium-Nitrate	120
Chlorine	200	Potassium Ferricyanide	200	8-8-8 Fertilizer	120
Fluorine	N.R.	Potassium Nitrate	200	Shell D-D	N. R.
				Steam, Etc	180

N. R. = Not Recommended

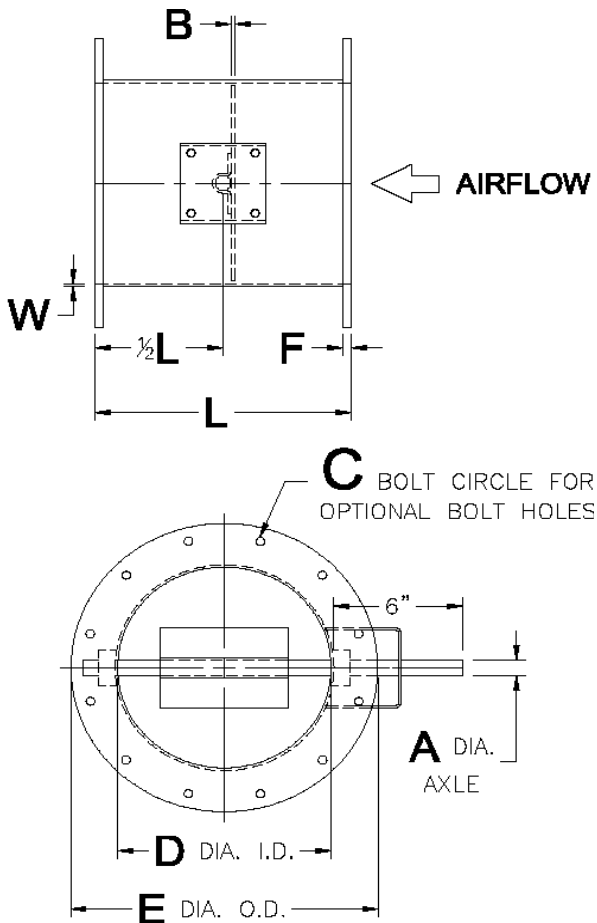
F = Fumes Only

S = Surfacing Mat

* Special hardware recommended; contact factory.

Note: Except where prefixed by "F" the resin manufacturers figures are for immersion and the resistance is higher where exposure to fumes only is required

VIRON® VCD SERIES ROUND CONTROL DAMPERS



• STANDARD FEATURES

- SOLID FRP FRAME
- SOLID FRP BLADE
- SOLID FRP AXLE LESS HANDLE
- VITON SHAFT SEAL
- MOLDED PTFE BEARINGS
- RESIN: REICHOLD VER9300FR
- EXTERIOR GEL COAT
- INTERIOR HARDWARE IS POLYPRO / NYLON
OR ENCAPSULATED STAINLESS STEEL

• OPTIONAL FEATURES

RESIN SELECTION	
HETRON 992	<input type="checkbox"/>
DERAKANE 510N	<input type="checkbox"/>
FLANGE DRILLING	
ONE FLANGE	<input type="checkbox"/>
TWO FLANGES	<input type="checkbox"/>
OPERATORS	
HAND QUADRANT	<input type="checkbox"/>
PNEUMATIC ACTUATOR	<input type="checkbox"/>
ELECTRIC ACTUATOR	<input type="checkbox"/>
BLADE CONFIGURATION	
VITON BLADE SEALS	<input type="checkbox"/>
BLADE STOPS	<input type="checkbox"/>
NEOPRENE BLADE SEALS	<input type="checkbox"/>
AXLE MATERIAL	
316 STAINLESS STEEL	<input type="checkbox"/>

• NOTES

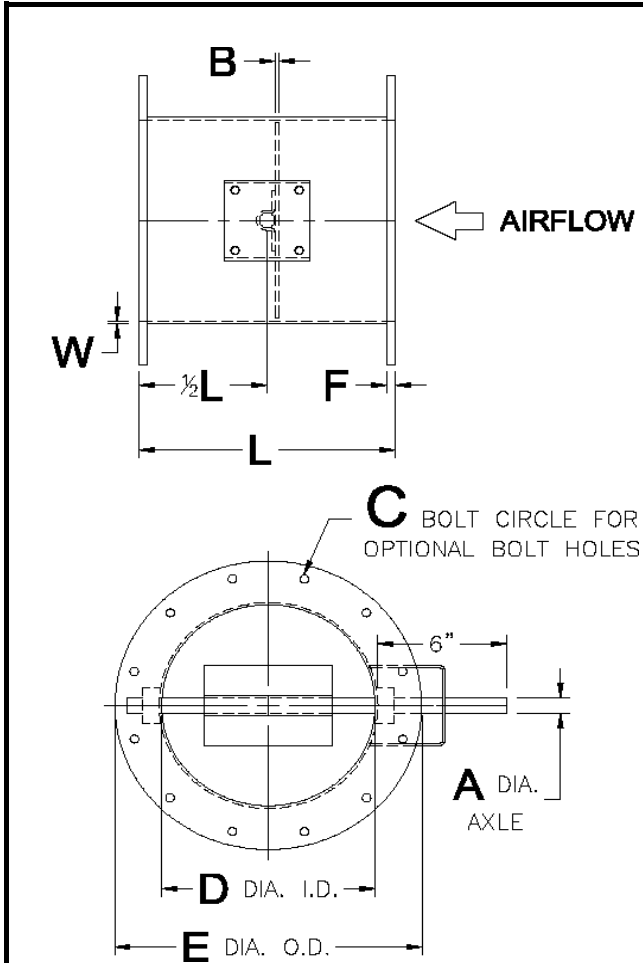
1. ALL OPTIONS PROVIDED AT AN ADDITIONAL COST.
2. DAMPER DESIGNED FOR 10" W.G.
3. BLADE SEALS NOT AVAILABLE WITH BLADE STOPS.
4. CONSTRUCTION PER NBS PS15-69.

PRINCIPLE DIMENSIONS FOR 10" S. P. DAMPER

D	E	A	B	C	F	L	W	D	E	A	B	C	F	L	W
4"	8-3/8"	1/2"	1/4"	7"	1/4"	6"	1/8"	30"	34-3/8"	1-1/2"	1/4"	33"	1/2"	12"	3/16"
6"	10-3/8"	3/4"	1/4"	9"	1/4"	6"	1/8"	32"	36-3/8"	1-1/2"	1/4"	35"	1/2"	12"	3/16"
8"	12-3/8"	3/4"	1/4"	11"	1/4"	8"	1/8"	34"	38-3/8"	1-1/2"	1/4"	37"	1/2"	12"	3/16"
10"	14-3/8"	3/4"	1/4"	13"	3/8"	10"	1/8"	36"	40-3/8"	1-1/2"	1/4"	39"	1/2"	12"	3/16"
12"	16-3/8"	1"	1/4"	15"	3/8"	12"	1/8"	38"	42-3/8"	2"	1/2"	41"	5/8"	12"	1/4"
14"	18-3/8"	1"	1/4"	17"	3/8"	12"	1/8"	40"	44-3/8"	2"	5/8"	43"	5/8"	12"	1/4"
16"	20-3/8"	1"	1/4"	19"	1/2"	12"	1/8"	42"	46-3/8"	2"	5/8"	45"	5/8"	12"	1/4"
18"	22-3/8"	1"	1/4"	21"	1/2"	12"	1/8"	48"	54-3/8"	2"	5/8"	52"	5/8"	12"	1/4"
20"	24-3/8"	1"	1/4"	23"	1/2"	12"	1/8"	54"	60-3/8"	2"	5/8"	58"	5/8"	14"	1/4"
22"	26-3/8"	1"	1/4"	25"	1/2"	12"	3/16"	60"	66-3/8"	2"	5/8"	64"	5/8"	14"	1/4"
24"	28-3/8"	1"	1/4"	27"	1/2"	12"	3/16"	62"	68-3/8"	2"	5/8"	66"	3/4"	14"	5/16"
26"	30-3/8"	1-1/2"	1/4"	29"	1/2"	12"	3/16"	66"	72-3/8"	2"	5/8"	70"	3/4"	14"	5/16"
28"	32-3/8"	1-1/2"	1/4"	31"	1/2"	12"	3/16"	72"	78-3/8"	2"	5/8"	76"	3/4"	14"	5/16"

NOTE: Dimensions should not be used for construction, certified prints are available when required.

VIRON® VCD SERIES ROUND CONTROL DAMPERS



- **STANDARD FEATURES**
 - SOLID FRP FRAME
 - SOLID FRP BLADE
 - SOLID FRP AXLE LESS HANDLE
 - VITON SHAFT SEAL
 - MOLDED PTFE BEARINGS
 - RESIN: REICHOLD VER9300FR
 - EXTERIOR GEL COAT
 - INTERIOR HARDWARE IS POLYPRO / NYLON OR ENCAPSULATED STAINLESS STEEL

- **OPTIONAL FEATURES**

RESIN SELECTION	
HETRON 992	
DERAKANE 510N	
FLANGE DRILLING	
ONE FLANGE	
TWO FLANGES	
OPERATORS	
HAND QUADRANT	
PNEUMATIC ACTUATOR	
ELECTRIC ACTUATOR	
BLADE CONFIGURATION	
VITON BLADE SEALS	
BLADE STOPS	
NEOPRENE BLADE SEALS	
AXLE MATERIAL	
316 STAINLESS STEEL	

- **NOTES**

1. ALL OPTIONS PROVIDED AT AN ADDITIONAL COST.
2. DAMPER DESIGNED FOR 30" W.G.
3. BLADE SEALS NOT AVAILABLE WITH BLADE STOPS.
4. CONSTRUCTION PER NBS PS15-69.

PRINCIPLE DIMENSIONS FOR 30" S. P. DAMPER

D	E	A	B	C	F	L	W	D	E	A	B	C	F	L	W
4"	8-3/8"	1/2"	1/4"	7"	1/4"	6"	1/8"	30"	34-3/8"	1-1/2"	1/4"	33"	1/2"	12"	5/16"
6"	10-3/8"	3/4"	1/4"	9"	1/4"	6"	1/8"	32"	36-3/8"	1-1/2"	1/4"	35"	1/2"	12"	5/16"
8"	12-3/8"	3/4"	1/4"	11"	1/4"	8"	1/8"	34"	38-3/8"	1-1/2"	1/4"	37"	1/2"	12"	5/16"
10"	14-3/8"	3/4"	1/4"	13"	3/8"	10"	3/16"	36"	40-3/8"	1-1/2"	1/4"	39"	1/2"	12"	5/16"
12"	16-3/8"	1"	1/4"	15"	3/8"	12"	3/16"	38"	42-3/8"	2"	1/2"	41"	5/8"	12"	5/16"
14"	18-3/8"	1"	1/4"	17"	3/8"	12"	3/16"	40"	44-3/8"	2"	5/8"	43"	5/8"	12"	5/16"
16"	20-3/8"	1"	1/4"	19"	1/2"	12"	3/16"	42"	46-3/8"	2"	5/8"	45"	5/8"	12"	5/16"
18"	22-3/8"	1"	1/4"	21"	1/2"	12"	3/16"	48"	54-3/8"	2"	5/8"	52"	5/8"	12"	5/16"
20"	24-3/8"	1"	1/4"	23"	1/2"	12"	3/16"	54"	60-3/8"	2"	5/8"	58"	5/8"	14"	3/8"
22"	26-3/8"	1"	1/4"	25"	1/2"	12"	1/4"	60"	66-3/8"	2"	5/8"	64"	5/8"	14"	3/8"
24"	28-3/8"	1"	1/4"	27"	1/2"	12"	1/4"	62"	68-3/8"	2"	5/8"	66"	3/4"	14"	3/8"
26"	30-3/8"	1-1/2"	1/4"	29"	1/2"	12"	1/4"	66"	72-3/8"	2"	5/8"	70"	3/4"	14"	3/8"
28"	32-3/8"	1-1/2"	1/4"	31"	1/2"	12"	1/4"	72"	78-3/8"	2"	5/8"	76"	3/4"	14"	3/8"

NOTE: Dimensions should not be used for construction, certified prints are available when required.

VIRON® VCD SERIES RECTANGLE CONTROL DAMPERS

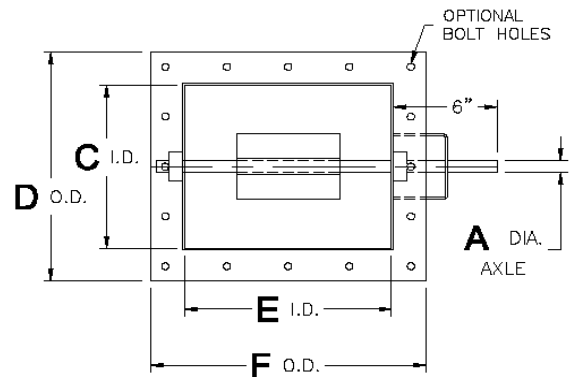
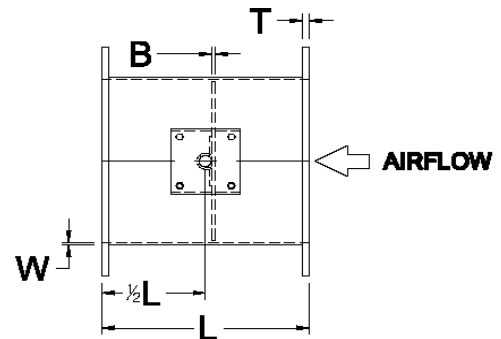
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 - SOLID FRP BLADE
 - SOLID FRP AXLE LESS HANDLE
 - VITON SHAFT SEAL
 - MOLDED PTFE BEARINGS
 - RESIN: REICHHOLD VER9300FR
 - EXTERIOR GEL COAT
 - INTERIOR HARDWARE IS POLYPRO / NYLON OR ENCAPSULATED STAINLESS STEEL

- **OPTIONAL FEATURES**

RESIN SELECTION	
HETRON 992	
DERAKANE 510N	
FLANGE DRILLING	
ONE FLANGE	
TWO FLANGES	
OPERATORS	
HAND QUADRANT	
PNEUMATIC ACTUATOR	
ELECTRIC ACTUATOR	
BLADE CONFIGURATION	
VITON BLADE SEALS	
BLADE STOPS	
NEOPRENE BLADE SEALS	
AXLE MATERIAL	
316 STAINLESS STEEL	

- **NOTES**

1. ALL OPTIONS PROVIDED AT AN ADDITIONAL COST.
2. DAMPER DESIGNED FOR 10" W.G.
3. BLADE SEALS NOT AVAILABLE WITH BLADE STOPS.
4. CUSTOM SIZES AVAILABLE - CONSULT FACTORY.
5. CONSTRUCTION PER NBS PS15-69.



PRINCIPLE DIMENSIONS FOR 10" S. P. DAMPER

E	C	F	D	A	B	T	L	W	E	C	F	D	A	B	T	L	W
8"				3/4"	1/4"	1/4"	8"	3/16"	34"				1-1/2"	1/4"	1/2"	12"	1/4"
10"				3/4"	1/4"	3/8"	10"	3/16"	36"				1-1/2"	1/4"	1/2"	12"	1/4"
12"				1"	1/4"	3/8"	12"	3/16"	38"				2"	1/2"	5/8"	12"	5/16"
14"				1"	1/4"	3/8"	12"	3/16"	40"				2"	5/8"	5/8"	12"	5/16"
16"				1"	1/4"	1/2"	12"	3/16"	42"				2"	5/8"	5/8"	12"	5/16"
18"				1"	1/4"	1/2"	12"	3/16"	44"				2"	5/8"	5/8"	12"	5/16"
20"				1"	1/4"	1/2"	12"	3/16"	46"				2"	5/8"	5/8"	12"	5/16"
22"				1"	1/4"	1/2"	12"	1/4"	48"				2"	5/8"	5/8"	12"	5/16"
24"				1"	1/4"	1/2"	12"	1/4"	54"				2"	5/8"	5/8"	14	5/16"
26"				1-1/2"	1/4"	1/2"	12"	1/4"	60"				2"	5/8"	5/8"	14	5/16"
28"				1-1/2"	1/4"	1/2"	12"	1/4"	62"				2"	5/8"	3/4"	14	3/8"
30"				1-1/2"	1/4"	1/2"	12"	1/4"	66"				2"	5/8"	3/4"	14	3/8"
32"				1-1/2"	1/4"	1/2"	12"	1/4"	72"				2"	5/8"	3/4"	14	3/8"

NOTE: Dimensions should not be used for construction, certified prints are available when required.

VIRON® VCD SERIES RECTANGLE CONTROL DAMPERS

STANDARD FEATURES

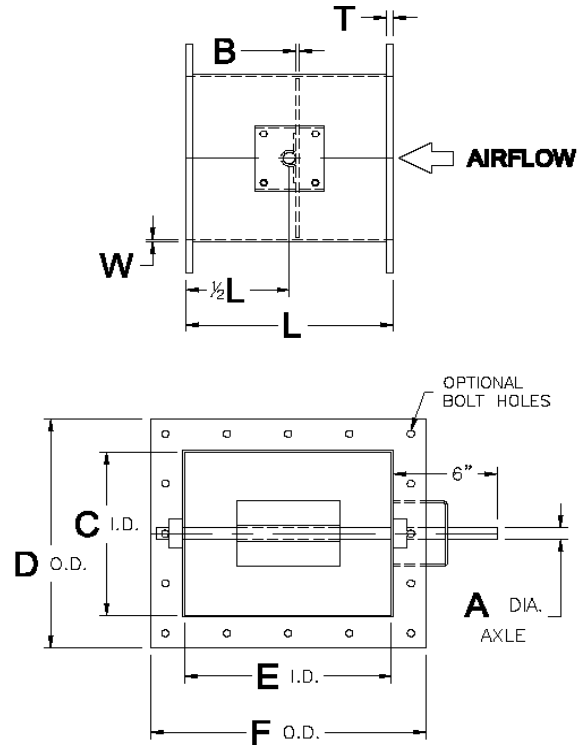
- SOLID FRP FRAME
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OPTIONAL FEATURES

RESIN SELECTION	
HETRON 992	<input type="checkbox"/>
DERAKANE 510N	<input type="checkbox"/>
FLANGE DRILLING	
ONE FLANGE	<input type="checkbox"/>
TWO FLANGES	<input type="checkbox"/>
OPERATORS	
HAND QUADRANT	<input type="checkbox"/>
PNEUMATIC ACTUATOR	<input type="checkbox"/>
ELECTRIC ACTUATOR	<input type="checkbox"/>
BLADE CONFIGURATION	
VITON BLADE SEALS	<input type="checkbox"/>
BLADE STOPS	<input type="checkbox"/>
NEOPRENE BLADE SEALS	<input type="checkbox"/>
AXLE MATERIAL	
316 STAINLESS STEEL	<input type="checkbox"/>

NOTES

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5. CONSTRUCTION PER NBS PS15-69.



PRINCIPLE DIMENSIONS FOR 30" S. P. DAMPER

E	C	F	D	A	B	T	L	W	E	C	F	D	A	B	T	L	W
8"				3/4"	1/4"	1/4"	8"	1/4"	34"				1-1/2"	1/4"	1/2"	12"	5/16"
10"				3/4"	1/4"	3/8"	10"	1/4"	36"				1-1/2"	1/4"	1/2"	12"	5/16"
12"				1"	1/4"	3/8"	12"	1/4"	38"				2"	1/2"	5/8"	12"	3/8"
14"				1"	1/4"	3/8"	12"	1/4"	40"				2"	5/8"	5/8"	12"	3/8"
16"				1"	1/4"	1/2"	12"	1/4"	42"				2"	5/8"	5/8"	12"	3/8"
18"				1"	1/4"	1/2"	12"	1/4"	44"				2"	5/8"	5/8"	12"	3/8"
20"				1"	1/4"	1/2"	12"	1/4"	46"				2"	5/8"	5/8"	12"	3/8"
22"				1"	1/4"	1/2"	12"	5/16"	48"				2"	5/8"	5/8"	12"	3/8"
24"				1"	1/4"	1/2"	12"	5/16"	54"				2"	5/8"	5/8"	14	3/8"
26"				1-1/2"	1/4"	1/2"	12"	5/16"	60"				2"	5/8"	5/8"	14	3/8"
28"				1-1/2"	1/4"	1/2"	12"	5/16"	62"				2"	5/8"	3/4"	14	7/16"
30"				1-1/2"	1/4"	1/2"	12"	5/16"	66"				2"	5/8"	3/4"	14	7/16"
32"				1-1/2"	1/4"	1/2"	12"	5/16"	72"				2"	5/8"	3/4"	14	7/16"

NOTE: Dimensions should not be used for construction, certified prints are available when required.

- **LIMITED WARRANTY**

VIRON[®] INTERNATIONAL warrants to the dealers and owners its VIRON[®] products and parts to be free from defects in workmanship and material under normal use and services for one (1) year after the date of shipment by VIRON to the first retail purchaser or first user: if and only if VIRON[®] is notified in writing of the defect within fourteen (14) days from date that the defect is discovered. Written notice of defects discovered within the final fourteen (14) days of the warranty period must be sent to VIRON[®] via facsimile or first class mail prior to the expiration of the warranty period otherwise this warranty shall be void. Our obligation under this warranty is expressly limited to repairing or replacing at our option, without cost at our factory any part or parts thereof which shall be returned to and received by VIRON[®] within such warranty period with transportation charges both to and from VIRON[®] prepaid, and which our examination shall disclose to our satisfaction to have been defective. In the event a defect is discovered within the final seven days of the warranty period, the returned goods must be received by VIRON[®] at VIRON[®]'s facility within seven days following expiration of the warranty period. Any request for repair or replacement should be directed to VIRON[®] INTERNATIONAL, Owosso, MI.

If examined equipment is found not to be defective or for some other reason not to be within the warranty coverage, seller's service time expended on and off location will be charged to the purchaser. This warranty gives you specific legal rights which vary from state to state. FAILURE TO PAY THE INVOICE IN FULL WILL RESULT IN VOIDING ANY AND ALL WARRANTIES.

- **LIMITATION OF WARRANTY AND LIABILITY**

This warranty does not apply to such VIRON[®] products and parts which in the sole judgment of VIRON[®] have failed as a result of faulty installation or abuse, or incorrect electrical connections or alterations, made by others, or use under abnormal operating conditions or misapplication of products and parts.

This warranty does not apply to damage resulting from shipment or storage of VIRON[®] products. Purchaser acknowledges that VIRON[®] products contain rotating parts that may be damaged by the forces of nature if not installed or put to their intended use within seven (7) days of delivery. THIS WARRANTY DOES NOT COVER COMPONENT PARTS THAT CARRY A SEPARATE WARRANTY FROM THE MANUFACTURER OF THE COMPONENT PART.

VIRON[®] will not approve for payment any repair made outside its factory without prior written consent of its Owosso, Michigan office. The foregoing shall constitute our sole and exclusive warranty and our sole and exclusive liability and is in lieu of all other warranties, whether written, oral, implied or statutory.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE PAGE HEREOF. SELLER DOES NOT WARRANT MERCHANTABILITY THAT SAID GOODS AND ARTICLES ARE OF MERCHANTABILITY QUALITY, OR THAT THEY ARE FIT FOR ANY PARTICULAR PURPOSE.

The liability of any seller on any claim of any kind, including contract, warranty, tort, or negligence, for any loss or damage arising out of or connected with or resulting from the sale and purchase of products and parts covered by any VIRON[®] proposal, acknowledgement, order, or from the performance or breach of any contract pertaining to such sale or purchase, or from the design, manufacture, sale, delivery, resale, installation, technical direction in installation, inspection, repair, operation or use of any products or parts covered by any VIRON[®] proposal, acknowledgement, order or furnished by seller, shall in no case exceed the price as paid by purchaser allocable to the products or parts thereof which give rise to the claim and shall terminate one year after shipment of said products and parts.

IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT, OR WARRANTY, OR TORT, OR ALLEGED NEGLIGENCE, DEFECTS, INCORRECT ADVICE OR OTHER CAUSES, SHALL SELLER BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, including but not limited to loss of profits or revenue, loss of use of the equipment or any associated equipment, cost of removal or reinstallation or any cost associated therewith, cost capital, cost of substitute equipment, facilities or services, down time cost, or claims of customers of the purchase of such damages.

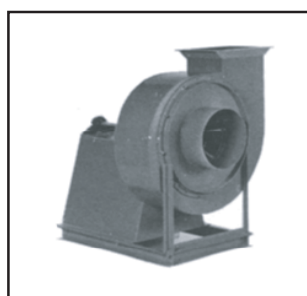
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Centrifugal Fan
VCF-100



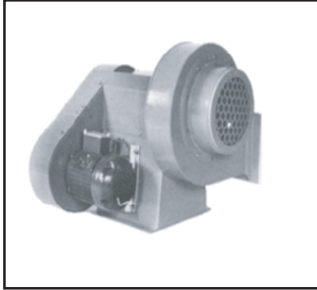
Inline Centrifugal Fan
VIF-200



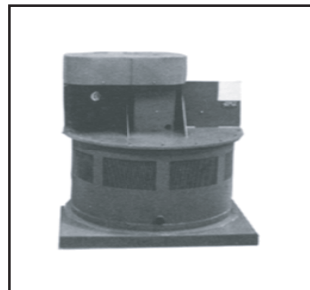
Radial Blower
VRB-600



Lab Blower
VLB-700



PushBlower
VPB-800



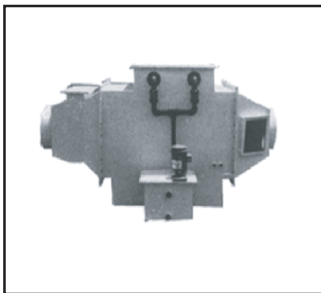
Roof Ventilator
VRV-900



Centrifugal Fan
VCB-1100



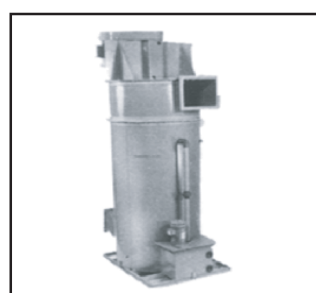
Gravity Relief Ventilator
VGR-1300



Horizontal Scrubber
VHS-Series



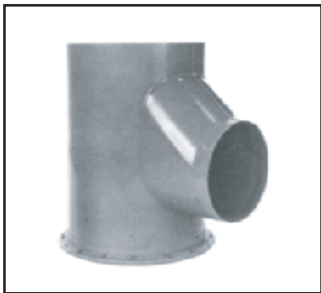
Vertical Scrubber
VVS-Series



Blower-Scrubber
VBS-Series



VIRO-CHROME 9000®
VCS-Series



VI-A-DUC®
FM Approved PVC Duct



VIRO-DUC®
FM Approved FRP Duct



SSTEELCOAT®
FM Approved Duct



FRP Duct
ICBO Approved



VI-A-TROL®
AMCA Approved Damper



PVC & FRP
Blastgates



FRP Parallel
Blade Damper



FRP Fixed Louver



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