

ProDuct - Fume Exhaust System

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ProDuct - Fume Exhaust System

ProDuct Guide Specification Fume Exhaust Systems

Scope: This Specification encompasses Polypropylene (PP), and Flame Retardant Polypropylene PPs, thickness's, and welding methods used for corrosive exhaust gas ventilation piping. 3" (90mm) thru 24" (630mm).

1.0 Material Polypropylene (PP)

Material of construction shall be from Group 1. Class 1, Grade 0 Polypropylene Homopolymer material per ASTM-D4101, Federal Specification L-P-39413 and Military Spec Mil P 461096. PP material to be heat stabilized, UV stabilized and pigmented to RAL 7032.

1A.0 Alternate Flame Retardant Polypropylene (PPs)

Material shall be Group 1. Class 1, Grade 0 Polypropylene Homopolymer material per ASTM- D4101, Federal Specification L-P-39413 and Military Spec Mil P 461096. PP material to be heat stabilized, U.V. stabilized and will have a flame retardant additive, and pigmented to RAL 7037. Combustion behavior shall be as follows:

*BI Flame Retardant per DIN 4102
28% Oxygen Index per ASTM2863
>3800 C Ignition Temperature per ASTM 1929
Y=0 Class per U.L. 94*

1.1 Duct

Shall be seamless, extruded from the specified material and shall have uniform, consistent wall thickness and roundness. Wall thickness as detailed in paragraph 1.4.

1.2 Fittings

All directional fittings shall be molded from the specified material. Mitered and hot gas welded fittings are not allowed except for assemblies which are not manufactured as a molded component. Fittings and coupling shall have socket ends which fit snugly around the entire periphery of the pipe. Joints are completed by back welding with hot gas and welding rod.

1.3 Welding rod

Welding rod shall be the same material as the pipe and fitting.

1.3.1 Use of Welder

Welding is to be performed using a hot gas welder having a source of clean dry air or inert gas. Compressed air shall not be used for welding.

1.4 Wall Thickness

Minimal Wall thicknesses will be as follows:

<u>Diameter</u>	<u>Thickness</u>	<u>Diameter</u>	<u>Thickness</u>
4" (110mm)	3.0mm	14" (355mm)	5.0mm
6" (160mm)	3.0mm	16" (400mm)	6.0mm
8" (200mm)	3.0mm	18" (450mm)	7.0mm
10" (250mm)	3.5mm	20" (500mm)	8.0mm
12" (315mm)	5.0mm	24" (630mm)	10.0mm

2.0 Static Loading

Duct and fittings shall be capable of a maximum 1 bar (14.5psi) static pressure and a maximum of 0.5 bar negative static pressure.

ProDuct - Fume Exhaust System

Polypropylene Material Characteristics

Properties	Test Standard	Test Method Test Specimen	Dimension	PP		
				Type 1	Type 2	Type 3
Mechanical Properties						
Density	DIN 53479	Method C	g/cm ³	0.91	0.91	0.95
Melting Index Group	DIN 16776	MFI 190-5	Group	006	006	012
Tensile Test	DIN 53455	Test Bar 3	—	—	—	—
Yield Stress	—	Test Speed 50 mm/min	N/mm ²	33	26	32 ²
Elongation At Yield Stress	—	—	%	15	17	14
Elongation At Rupture	—	—	%	70	120	70
Bending Test	DIN 53457	Test Bar	—	—	—	—
Bending Modulus E	1 min.	120 x 10 x 4 mm	N/mm ²	1200	900	1300
Impact Bending Test	DIN 53453	Charpy	—			
Impact Strength	—	Standard Miniature Bar	kJ/m ²	Without Break	Without Break	Without Break
Notched Bar Impact Strength	—	Standard Miniature Bar With U-Notch	kJ/m ²	7	25	5
Surface Hardness						
Ball Impression Hardness	DIN 53456	H 358/30	N/mm ²	70	664	70
Shore Hardness	DIN 53505	D	—	72	67	72
Thermal Properties						
Crystallite Melting Range	—	Polarization Microscope	K (°C)	160 - 165	160 - 164	160 - 165
Mean Thermal Coefficient Of Linear Expansion	DIN 53752	—	K (°C)	1.6 x 10 ⁻⁴	1.6 x 10 ⁻⁴	1.6 x 10 ⁻⁴
Thermal Conductivity	DIN 52612	Two-Plate Method	W/m x K	0.22	0.22	0.22
Electrical Properties						
Dielectric Strength	DIN 53481	K 20/P 50	kV/mm	52	52	22
Impedance	DIN 53482	Annular Electrode	Ohm x cm	> 10 ¹⁶	> 10 ¹⁶	> 10 ¹⁷
Surface Resistance	DIN 53482	Electrode A	Ohm	10 ¹⁴	10 ¹⁴	10
Leakage Path Resistance	DIN 53480	Method KC	Step	> 600	> 600	> 600
Other Properties						
Flammability	DIN 4102	—	Class	B2	B2	B1
Water Absorption	DIN 53495	Method C	% / 24h	< 0.01	< 0.01	< 0.01
Physiologically Harmless	Recommendation	BGA/KTW	—	YES	YES	NO
Chemical Resistance	DIN 8078 Addendum	—	—	Complies	Complies	Complies

ProDuct - Fume Exhaust System

Polypropylene Combustion Behavior

DIN 4102 distinguishes between:

- non combustible material (Class A) and
- combustible material (Class B)

Plastics belong without exception to the latter class.

A further distinction is made within the classes:

- B 1 flame retardant
- B 2 normally combustible
- B 3 easily combustible

Table 2

Assessment of combustion behavior

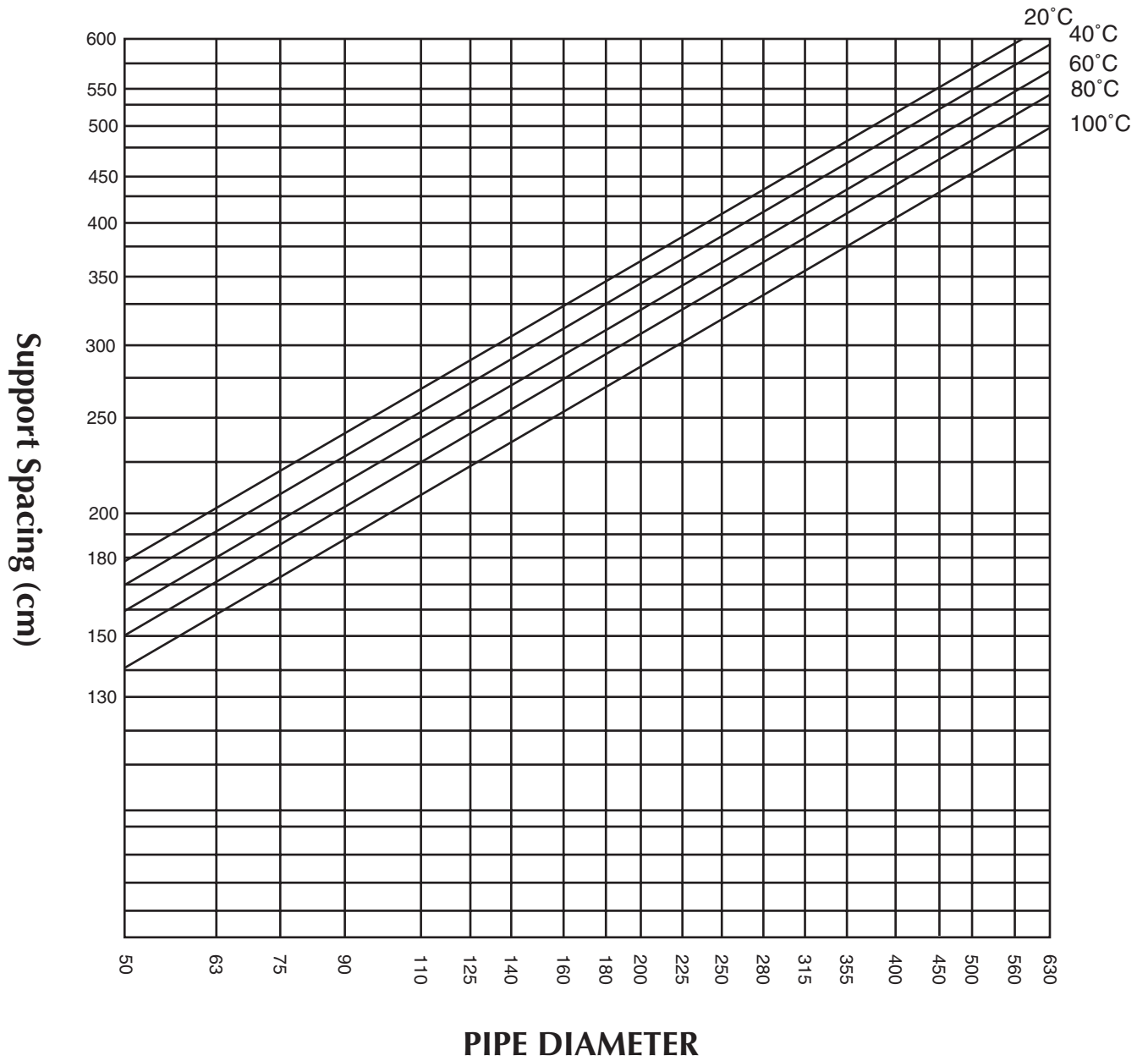
Material	Combustion behavior acc. to DIN 4102 Class	External ignition temperature acc. to ASTM 1929 °C	Oxygen Index According to ASTM 2863 %	Assessment* acc. to UL 94 Class	Assessment according to DIN 53438 Class	
PE-HD VPE PE-EL PB	B2	340	18		F2	K2
PP Type 1 PP Type 2 PP Type 3		345				
PVC PPs PVDF	B1	> 390	40	V-0	F1	K1
		> 380	28	V-0		
		> 600	78	V-0		

Further information about the combustion behavior is contained in the oxygen index (see table 2). This number indicates the minimum oxygen concentration in the combustion atmosphere which is necessary for sustained combustion. If the values are less than 20.8 % (oxygen content in the atmosphere), ignition and continuous combustion after removal of the source of ignition is possible.

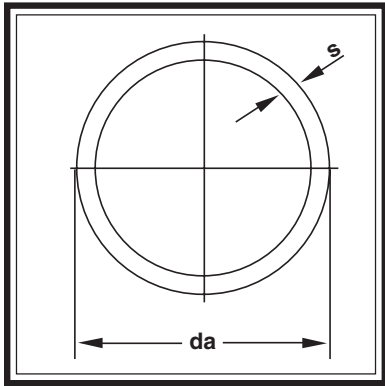
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SIMTECH PP AND PP_s DUCT SUPPORT SPACING

(Based on 1 cm deflection after 10 years)



ProDuct - Fume Exhaust System



Fume Exhaust Pipe

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

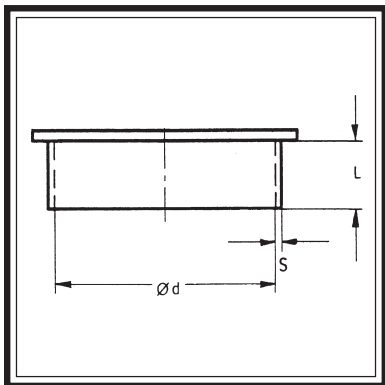
PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	da	s - PP	s - PPS	lbs
4"	110mm	110	0.134	0.118	2.284
6"	160mm	160	0.192	0.118	3.335
8"	200mm	200	0.244	0.118	4.191
10"	250mm	250	0.303	0.138	6.123
12"	315mm	315	0.386	0.197	10.842
14"	355mm	355	0.429	0.197	12.250
16"	400mm	400	0.236	0.236	16.504
18"	450mm	450	0.279	0.279	21.601
20"	500mm	500	0.315	0.315	27.438
22"	560mm	560	0.315	0.315	30.729
24"	630mm	630	0.394	0.394	43.023



End Cap

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	Ød	S	D	L	d	lbs
4"	110mm	0.118	5.510	0.984	4.330	0.287
6"	160mm	0.118	7.480	0.984	6.300	0.463
8"	200mm	0.118	9.250	0.984	7.870	0.573
10"	250mm	0.118	11.020	0.984	9.840	0.662
12"	315mm	0.118	13.970	0.984	12.400	1.103
14"	355mm	0.197	15.550	0.984	19.980	1.323
16"	400mm	0.197	16.980	0.984	15.750	1.654
18"	450mm	0.236	18.898	2.756	17.720	3.520
20"	500mm	0.236	20.870	2.756	19.690	3.960
22"	560mm	0.236	23.230	2.756	22.050	5.500
24"	630mm	0.236	25.980	2.756	24.800	6.600

ProDuct - Fume Exhaust System

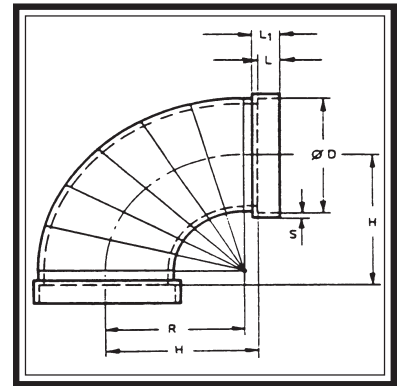
90° Elbow

$R = \phi D$

Material Options:

- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



Nom. Size	ϕD	S	L	L1	H	lbs
4"	110mm	0.118	1.575	1.969	4.724	0.551
6"	160mm	0.118	1.575	1.969	6.693	1.103
8"	200mm	0.118	1.969	2.362	8.268	2.646
10"	250mm	0.138	1.969	2.362	10.236	3.308
12"	315mm	0.197	1.969	2.362	12.795	7.056
14"	355mm	0.197	1.969	2.362	14.370	9.041
16"	400mm	0.236	2.362	2.756	16.142	11.246
18"	450mm	0.236	2.362	2.756	18.110	17.640
20"	500mm	0.236	2.362	2.756	20.079	22.050
22"	560mm	0.236	2.760	3.150	22.400	30.280
24"	630mm	0.236	2.760	3.150	25.590	38.500

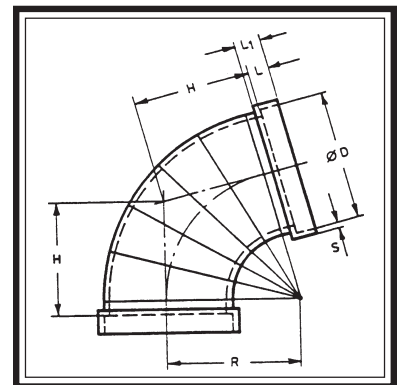
75° Elbow

$R = \phi D$

Material Options:

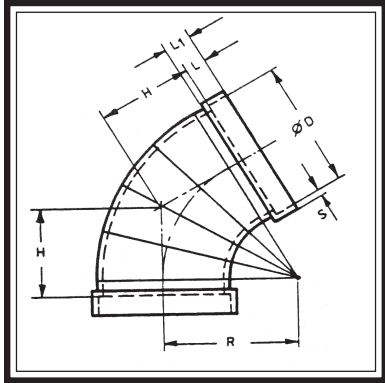
- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



Nom. Size	ϕD	S	L	L1	H	lbs
4"	110mm	0.118	1.575	1.969	3.740	0.551
6"	160mm	0.118	1.575	1.969	5.197	1.036
8"	200mm	0.118	1.969	2.362	6.457	1.610
10"	250mm	0.138	1.969	2.362	7.953	2.800
12"	315mm	0.197	1.969	2.362	9.921	5.865
14"	355mm	0.197	1.969	2.362	11.102	7.277
16"	400mm	0.236	2.362	2.756	12.441	11.113
18"	450mm	0.236	2.362	2.756	13.976	17.420
20"	500mm	0.236	2.362	2.756	15.512	21.609
22"	560mm	0.236	2.760	3.150	17.510	27.300
24"	630mm	0.236	2.760	3.150	19.880	33.000

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60° Elbow

$R = \text{ØD}$

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

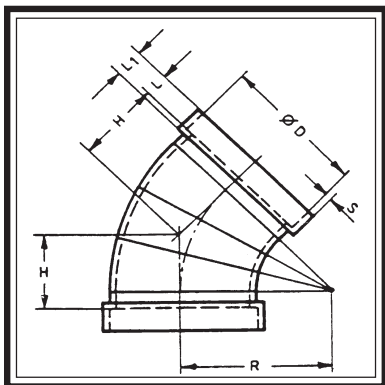
PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	S	L	L1	H	lbs
4"	110mm	0.118	1.575	1.969	2.913	0.485
6"	160mm	0.118	1.575	1.969	4.016	0.882
8"	200mm	0.118	1.969	2.362	4.961	1.389
10"	250mm	0.138	1.969	2.362	6.063	2.359
12"	315mm	0.197	1.969	2.362	7.559	4.939
14"	355mm	0.197	1.969	2.362	8.425	6.108
16"	400mm	0.236	2.362	2.756	9.449	9.371
18"	450mm	0.236	2.362	2.756	10.63	14.553
20"	500mm	0.236	2.362	2.756	11.732	18.302
22"	560mm	0.236	2.760	3.150	13.310	22.900
24"	630mm	0.236	2.760	3.150	15.160	27.500



45° Elbow

$R = \text{ØD}$

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	S	L	L1	H	lbs
4"	110mm	0.118	1.575	1.969	2.283	0.419
6"	160mm	0.118	1.575	1.969	2.992	0.750
8"	200mm	0.118	1.969	2.362	3.701	1.169
10"	250mm	0.138	1.969	2.362	4.488	1.962
12"	315mm	0.197	1.969	2.362	5.591	4.035
14"	355mm	0.197	1.969	2.362	6.220	4.961
16"	400mm	0.236	2.362	2.756	6.926	7.607
18"	450mm	0.236	2.362	2.756	7.795	11.907
20"	500mm	0.236	2.362	2.756	8.583	14.774
22"	560mm	0.236	2.760	3.150	9.660	18.390
24"	630mm	0.236	2.760	3.150	11.020	22.000

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30° Elbow

$R = \phi D$

Material Options:

PP - Polypropylene

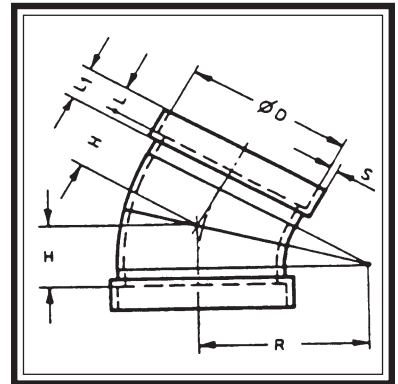
PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details



Nom. Size	ϕD	S	L	L1	H	lbs
4"	110mm	0.118	1.575	1.969	1.575	0.353
6"	160mm	0.118	1.575	1.969	2.047	0.617
8"	200mm	0.118	1.969	2.362	3.701	0.948
10"	250mm	0.138	1.969	2.362	3.071	1.566
12"	315mm	0.197	1.969	2.362	3.740	3.131
14"	355mm	0.197	1.969	2.362	4.173	3.793
16"	400mm	0.236	2.362	2.756	4.646	5.843
18"	450mm	0.236	2.362	2.756	5.118	9.041
20"	500mm	0.236	2.362	2.756	5.669	11.246
22"	560mm	0.236	2.760	3.150	6.510	13.540
24"	630mm	0.236	2.760	3.150	7.480	15.840

15° Elbow

$R = \phi D$

Material Options:

PP - Polypropylene

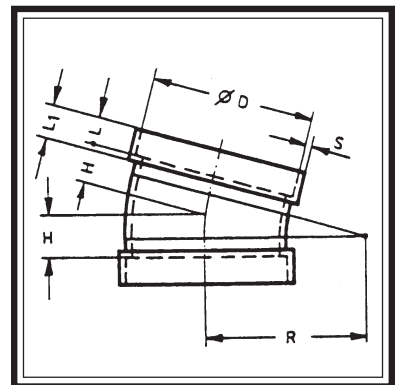
PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

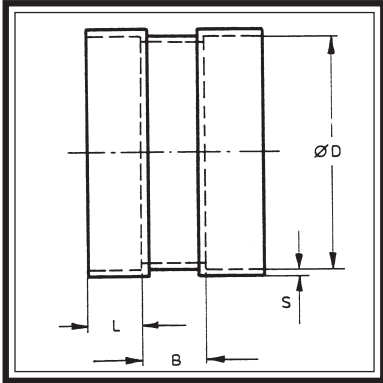
Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details



Nom. Size	ϕD	S	L	L1	H	lbs
4"	110mm	0.118	1.575	1.969	0.984	0.287
6"	160mm	0.118	1.575	1.969	1.220	0.463
8"	200mm	0.118	1.969	2.362	1.417	0.728
10"	250mm	0.138	1.969	2.362	1.693	1.147
12"	315mm	0.197	1.969	2.362	2.047	2.227
14"	355mm	0.197	1.969	2.362	2.205	2.646
16"	400mm	0.236	2.362	2.756	2.441	4.101
18"	450mm	0.236	2.362	2.756	2.756	6.395
20"	500mm	0.236	2.362	2.756	2.992	7.938
22"	560mm	0.236	2.760	3.150	3.590	8.920
24"	630mm	0.236	2.760	3.150	4.130	9.900

ProDuct - Fume Exhaust System



Coupling

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

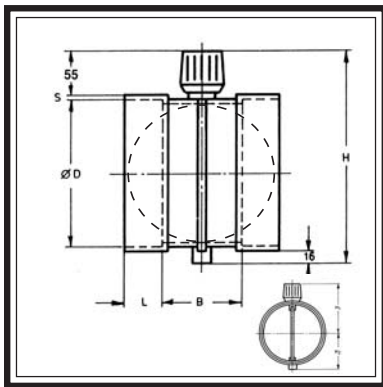
PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

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Nom. Size	ØD	S	B	L
4"	110mm	0.118	6.102	1.575
6"	160mm	0.118	6.102	1.575
8"	200mm	0.118	6.693	1.969
10"	250mm	0.118	6.890	1.969
12"	315mm	0.118	6.890	1.969
14"	355mm	0.197	6.299	1.969
16"	400mm	0.197	6.299	1.969
18"	450mm	0.236	7.874	3.937
20"	500mm	0.236	7.874	3.937
22"	560mm	0.236	7.874	3.937
24"	630mm	0.236	7.874	3.937



Volume Control Damper with Continuous Adjustment Lock

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	S	L	B	H1	H2	H	lbs
4"	110mm	0.118	1.575	2.795	4.449	2.913	7.362	0.662
6"	160mm	0.118	1.575	2.759	5.433	3.898	9.331	0.882
8"	200mm	0.118	1.969	2.759	6.220	4.685	10.906	1.323
10"	250mm	0.118	1.969	2.835	7.205	5.669	12.874	1.764
12"	315mm	0.118	1.969	2.913	8.504	6.929	15.433	2.426
14"	355mm	0.197	1.969	2.362	9.252	7.717	16.969	3.528
16"	400mm	0.236	1.969	2.362	10.157	8.622	18.780	4.410
18"	450mm	0.236	1.969	7.870	12.400	10.240	22.640	16.500
20"	500mm	0.236	1.969	9.840	13.390	11.220	24.610	20.900
22"	560mm	0.236	1.969	11.810	14.570	12.400	26.970	24.200
24"	630mm	0.236	1.969	11.810	15.940	13.780	29.720	29.700

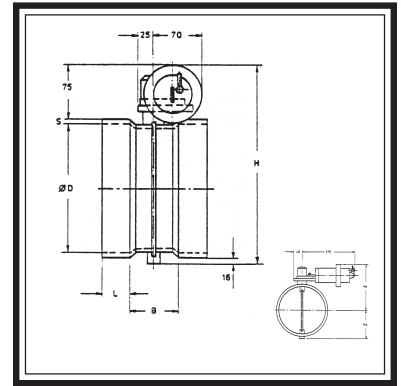
ProDuct - Fume Exhaust System

Pneumatically Actuated Volume Control Damper

Material Options:

- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



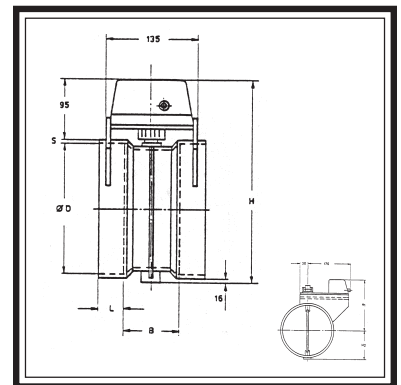
Nom. Size	ØD	S	L	B	H1	H2	H	lbs
4"	110mm	0.118	1.574	2.795	5.236	2.913	8.149	1.760
6"	160mm	0.118	1.574	2.795	6.220	3.897	10.118	1.980
8"	200mm	0.118	1.968	2.795	7.007	4.685	11.692	2.420
10"	250mm	0.118	1.968	2.834	2.992	5.669	13.661	2.860
12"	315mm	0.118	1.968	2.834	9.291	6.929	16.220	3.520
14"	355mm	0.196	1.968	2.834	10.157	7.795	17.952	4.400
16"	400mm	0.236	1.968	2.834	11.062	8.740	19.803	5.280

Electrically Actuated Volume Control Damper

Material Options:

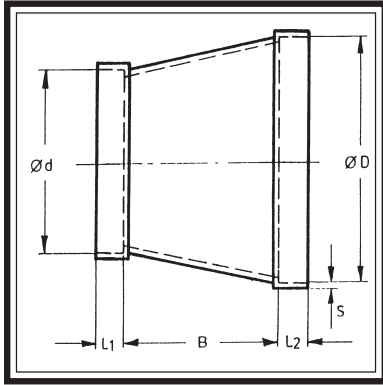
- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



Nom. Size	ØD	S	L	B	H1	H2	H	lbs
4"	110mm	0.118	1.574	2.795	6.023	2.913	8.937	4.620
6"	160mm	0.118	1.574	2.795	7.007	3.897	10.905	4.840
8"	200mm	0.118	1.968	2.795	7.795	4.685	12.480	5.280
10"	250mm	0.118	1.968	2.834	8.779	5.669	14.448	5.720
12"	315mm	0.118	1.968	2.834	10.078	6.929	17.007	6.380
14"	355mm	0.196	1.968	2.834	10.944	7.795	18.740	7.260
16"	400mm	0.236	1.968	2.834	11.850	8.740	20.590	8.140

ProDuct - Fume Exhaust System



Concentric Reducer

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

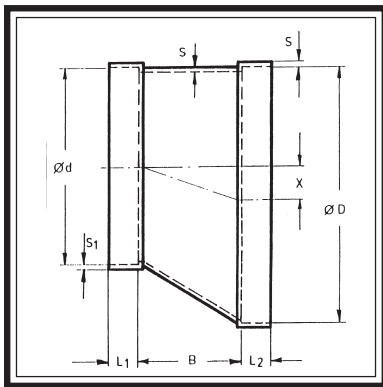
PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	Ød x ØD	B	L1	L2	lbs
4" x 3"	110mm x 90mm	2.165	1.575	1.575	0.243
6" x 4"	160mm x 110mm	4.331	1.575	1.575	0.529
8" x 6"	180mm x 160mm	2.362	1.575	1.575	0.662
10" x 6"	250mm x 160mm	7.480	1.575	1.969	1.433
10" x 8"	250 mmx 200mm	4.528	1.969	1.969	1.058
12" x 8"	315mm x 200mm	7.087	1.969	1.969	1.985
12" x 10"	315mm x 250mm	5.512	1.969	1.969	1.588
14" x 8"	355mm x 200mm	11.811	1.969	1.969	3.175
14" x 10"	355mm x 250mm	8.661	1.969	1.969	2.646
14" x 12"	355mm x 315mm	3.740	1.969	1.969	1.985
16" x 12"	400mm x 315mm	7.087	1.969	1.969	2.867
16" x 14"	400mm x 355mm	4.528	1.969	1.969	2.205



Eccentric Reducer

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	Ød x ØD	B	L1	L2	lbs
4" x 3"	110mm x 90mm	3.35	1.37	1.57	0.243
6" x 4"	160mm x 110mm	2.76	1.57	1.57	0.529
8" x 6"	180mm x 160mm	2.76	1.57	1.97	0.662
10" x 6"	250mm x 160mm	6.10	1.57	1.97	1.433
10" x 8"	250 mmx 200mm	3.35	1.97	1.97	1.058
12" x 8"	315mm x 200mm	7.87	1.97	1.97	1.985
12" x 10"	315mm x 250mm	4.53	1.97	1.97	1.588
14" x 8"	355mm x 200mm	10.63	1.97	1.97	3.175
14" x 10"	355mm x 250mm	7.09	1.97	1.97	2.646
14" x 12"	355mm x 315mm	2.76	1.97	1.97	1.985
16" x 12"	400mm x 315mm	2.90	1.97	2.36	2.867
16" x 14"	400mm x 355mm	3.15	1.97	2.36	2.205

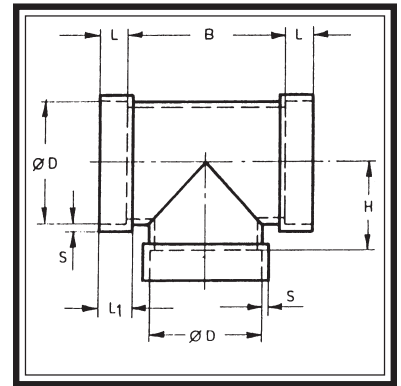
ProDuct - Fume Exhaust System

Tee

Material Options:

- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



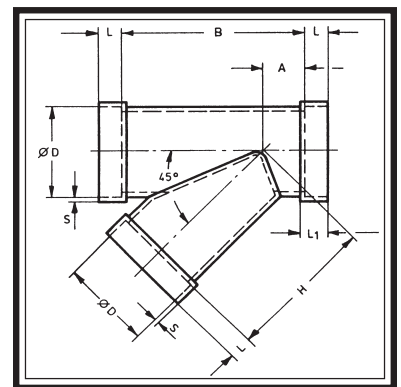
Nom. Size	ØD	S	L	B	L1	H	lbs. / PC.
4"	110mm	0.118	1.575	5.512	1.969	2.756	0.662
6"	160mm	0.118	1.575	9.252	1.969	3.740	1.323
8"	200mm	0.118	1.969	10.827	2.362	4.724	2.646
10"	250mm	0.138	1.969	12.205	2.362	5.709	3.528
12"	315mm	0.197	1.969	16.535	2.362	7.283	7.277
14"	355mm	0.197	1.969	18.110	2.362	9.055	7.497
16"	400mm	0.236	2.362	19.488	2.756	10.236	11.246
18"	450mm	0.236	2.756	23.228	2.756	11.614	15.435
20"	500mm	0.236	2.756	25.197	2.756	12.598	17.640
22"	560mm	0.236	2.756	27.559	2.756	13.780	22.050
24"	630mm	0.236	2.756	30.315	2.756	15.354	26.460

Lateral

Material Options:

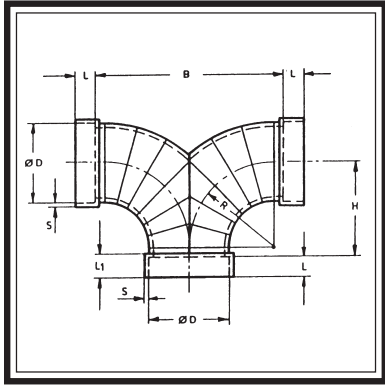
- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



Nom. Size	ØD	S	L	B	A	L1	H	lbs
4"	110mm	0.118	1.575	9.252	2.560	1.969	6.693	0.992
6"	160mm	0.118	1.575	12.795	3.346	1.969	9.449	1.874
8"	200mm	0.118	1.969	14.961	3.543	2.362	11.417	2.646
10"	250mm	0.138	1.969	18.701	4.528	2.362	14.173	4.851
12"	315mm	0.197	1.969	22.244	4.921	2.362	17.323	9.702
14"	355mm	0.197	1.969	24.409	5.118	2.362	19.291	11.907
16"	400mm	0.236	2.362	26.969	5.709	2.756	21.260	17.640
18"	450mm	0.236	2.756	33.071	7.677	2.756	25.394	24.255
20"	500mm	0.236	2.756	35.827	8.071	2.756	27.559	28.665
22"	560mm	0.236	2.756	38.976	8.465	2.756	30.512	34.178
24"	630mm	0.236	2.756	43.701	9.449	2.756	34.252	42.998

ProDuct - Fume Exhaust System



90° Double Wye

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

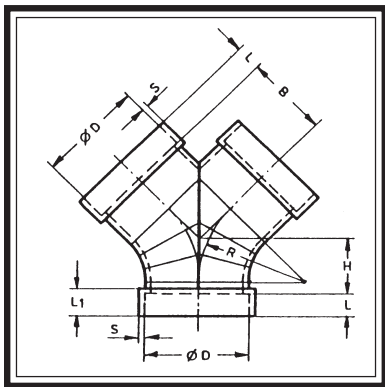
PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	S	L	B	L1	H	lbs
4"	110mm	0.118	1.575	9.449	1.969	4.724	0.882
6"	160mm	0.118	1.575	13.386	1.969	6.693	1.764
8"	200mm	0.118	1.969	16.535	2.362	8.268	3.087
10"	250mm	0.138	1.969	20.472	2.362	10.236	5.072
12"	315mm	0.197	1.969	25.591	2.362	12.795	10.584
14"	355mm	0.236	1.969	18.740	2.362	14.370	13.671
16"	400mm	0.236	2.362	32.283	2.756	16.142	16.979
18"	450mm	0.236	2.362	36.220	2.756	18.110	26.460
20"	500mm	0.236	2.362	40.157	2.756	20.079	33.075



45° Double Wye

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	S	L	B	L1	H	lbs
4"	110mm	0.118	1.575	3.740	1.969	2.362	0.772
6"	160mm	0.118	1.575	5.512	1.969	3.150	1.433
8"	200mm	0.118	1.969	6.890	2.362	3.740	2.426
10"	250mm	0.138	1.969	8.465	2.362	4.528	3.308
12"	315mm	0.197	1.969	10.827	2.362	5.709	6.615
14"	355mm	0.236	1.969	12.008	2.362	6.299	8.820
16"	400mm	0.236	2.362	13.976	2.756	7.087	13.892
18"	450mm	0.236	2.362	16.339	2.756	7.874	20.948
20"	500mm	0.236	2.362	18.110	2.756	8.661	23.153

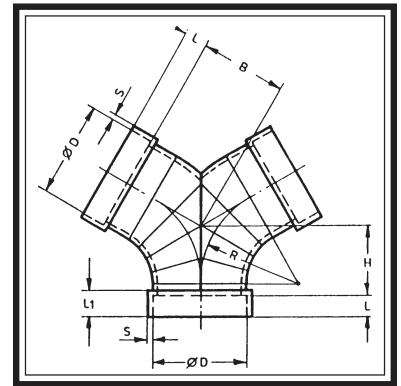
ProDuct - Fume Exhaust System

30° Double Wye

Material Options:

- PP - Polypropylene
- PPs - Flame Retardant Polypropylene
- PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
 Contact us for Details



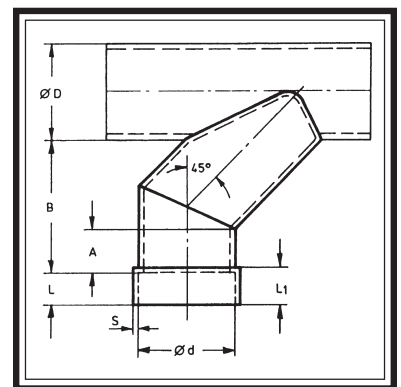
Nom. Size	ØD	S	L	B	L1	H	lbs
4"	110mm	0.118	1.575	3.150	1.969	3.150	0.662
6"	160mm	0.118	1.575	4.134	1.969	4.134	1.323
8"	200mm	0.118	1.969	5.118	2.362	5.118	2.205
10"	250mm	0.138	1.969	6.299	2.362	6.299	3.087
12"	315mm	0.197	1.969	7.677	2.362	7.677	5.733
14"	355mm	0.236	1.969	8.661	2.362	8.661	7.938
16"	400mm	0.236	2.362	9.646	2.756	9.646	10.584
18"	450mm	0.236	2.362	10.827	2.756	10.827	18.743
20"	500mm	0.236	2.362	12.008	2.756	12.008	20.948

90° Saddle Connection

Material Options:

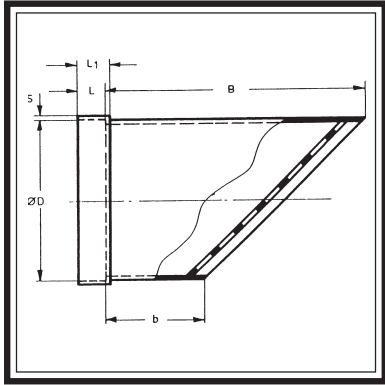
- PP - Polypropylene
- PPs - Flame Retardant Polypropylene
- PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
 Contact us for Details



Nom. Size	ØD	S	L	B	L1	A	lbs
4"	110mm	0.118	1.575	5.118	1.969	1.181	0.551
6"	160mm	0.118	1.575	7.283	1.969	1.575	1.103
8"	200mm	0.118	1.969	8.858	2.362	1.575	1.654
10"	250mm	0.138	1.969	11.039	2.362	1.969	2.867
12"	315mm	0.197	1.969	13.386	2.362	1.969	6.174
14"	355mm	0.236	1.969	14.764	2.362	1.969	7.718
16"	400mm	0.236	2.362	16.339	2.756	1.969	11.687
18"	450mm	0.236	2.362	18.504	2.756	2.362	15.435
20"	500mm	0.236	2.362	20.276	2.756	2.362	21.609
22"	560mm	2.756	2.756	22.441	4.331	2.362	30.209
24"	630mm	2.756	2.756	25.394	4.331	2.756	37.485

ProDuct - Fume Exhaust System



Bird Mesh Grille

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

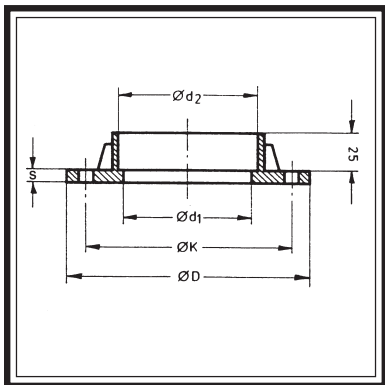
PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	S	B	b	L
4"	110mm	0.118	4.921	0.591	1.575
6"	160mm	0.118	7.677	1.378	1.575
8"	200mm	0.118	9.252	1.378	1.969
10"	250mm	0.138	11.024	1.181	1.969
12"	315mm	0.197	14.370	1.969	1.969
14"	355mm	0.197	15.945	1.969	1.969
16"	400mm	0.236	17.520	1.772	2.362



Flange

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	Ød2	S	D	K	d1	lbs
4"	110mm	0.315	6.693	5.906	4.173	0.287
6"	160mm	0.315	9.055	7.874	6.142	0.463
8"	200mm	0.315	10.630	9.449	7.717	0.573
10"	250mm	0.315	12.598	11.417	9.685	0.662
12"	315mm	0.394	15.551	13.780	12.165	1.103
14"	355mm	0.394	17.126	15.748	13.740	1.323
16"	400mm	0.394	18.898	17.520	15.512	1.654
18"	450mm	0.394	20.870	19.490	17.400	1.848
20"	500mm	0.394	22.830	21.460	19.290	2.112

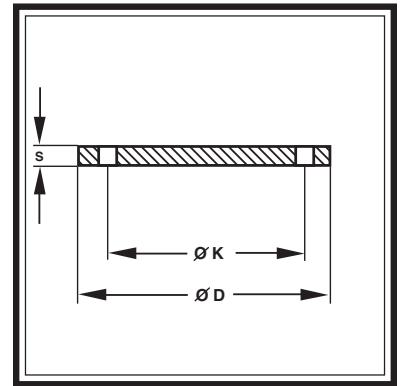
ProDuct - Fume Exhaust System

Blind Flange

Material Options:

- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



Nom. Size		S	D	K	lbs
4"	110mm	0.315	6.693	5.906	0.19
6"	160mm	0.315	9.055	7.874	0.41
8"	200mm	0.315	10.630	9.449	0.64
10"	250mm	0.472	12.598	11.417	1.50
12"	315mm	0.472	15.551	13.780	2.38
14"	355mm	0.472	17.126	15.748	3.02
16"	400mm	0.472	18.898	17.520	3.84
18"	450mm	0.787	20.870	19.490	8.04
20"	500mm	0.787	22.830	21.460	9.93

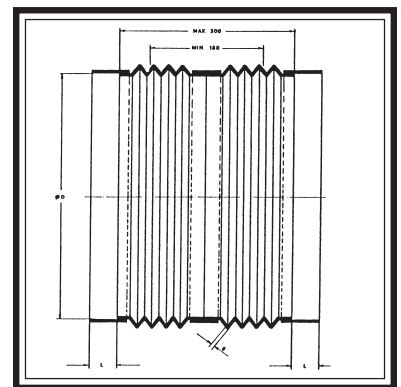
Expansion Joint

Also Available as Flanged

Material Options:

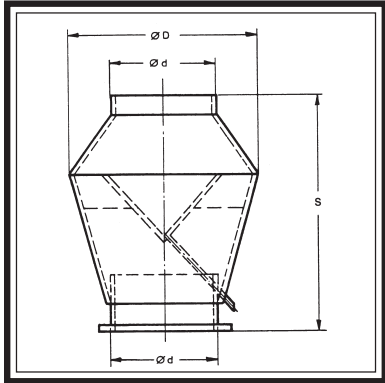
- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



Nom. Size	ØD	Max Expanded	Max Contracted	lbs
4"	110mm	6.69	5.12	0.374
6"	160mm	6.69	5.12	0.440
8"	200mm	6.69	5.12	0.680
10"	250mm	6.69	5.12	0.858
12"	315mm	6.69	5.12	1.080
14"	355mm	6.69	5.12	1.230
16"	400mm	6.69	5.12	1.390
18"	450mm	7.08	4.72	3.520
20"	500mm	7.08	4.72	3.740
22"	560mm	7.08	4.72	4.380
24"	630mm	7.08	4.72	4.930

ProDuct - Fume Exhaust System



Deflector Cowl

Material Options:

PP - Polypropylene

PPs - Flame Retardant Polypropylene

PVDF - Polyvinylidene Fluoride

Larger Sizes Available Upon Request

Fittings Now Available in PVC & CPVC IPS Sizes

Contact us for Details

Nom. Size	ØD	D	S
4"	110mm	7.087	10.630
6"	160mm	10.236	13.780
8"	200mm	12.795	16.535
10"	250mm	16.142	20.079
12"	315mm	20.079	24.803
14"	355mm	22.638	27.756
16"	400mm	25.591	32.283
18"	450mm	28.740	35.827
20"	500mm	32.283	40.551
22"	560mm	38.386	47.244
24"	630mm	40.160	49.600



PP Pipe Support galvanized with rubber insets

Larger Sizes Available Upon Request

Contact us for Details

Size	
4"	110mm
6"	160mm
8"	200mm
10"	250mm
12"	315mm
14"	355mm
16"	400mm
18"	450mm
20"	500mm
22"	560mm
24"	630mm

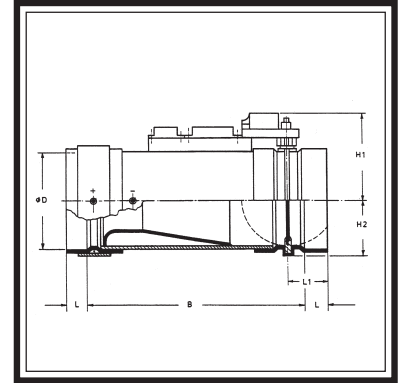
ProDuct - Fume Exhaust System

Volume Flow Controller

Material Options:

- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



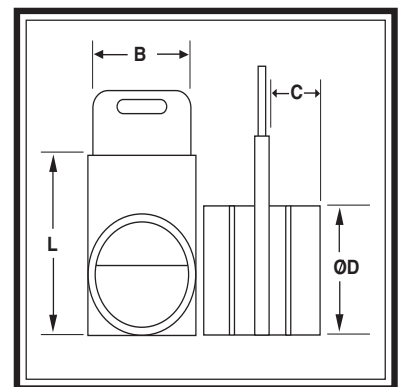
Nom. Size	ØD	L	B	H1	H2	L1
4"	110mm	1.574	17.716	5.472	2.795	2.874
6"	160mm	1.574	17.716	6.456	3.779	2.874
8"	200mm	1.968	20.078	7.244	4.566	3.346
10"	250mm	1.968	27.559	8.228	5.551	3.346
12"	315mm	1.968	29.921	9.527	6.850	3.346
14"	355mm	1.968	41.338	10.314	7.992	7.874
16"	400mm	1.968	43.307	11.181	8.858	7.874

Blastgates

Material Options:

- PP - Polypropylene**
- PPs - Flame Retardant Polypropylene**
- PVDF - Polyvinylidene Fluoride**

Larger Sizes Available Upon Request
Fittings Now Available in PVC & CPVC IPS Sizes
Contact us for Details



Nom. Size	ØD	L	B	H1
4"	110mm	9.000	7.500	3.00
6"	160mm	11.125	9.625	3.00
8"	200mm	13.125	11.625	3.00
10"	250mm	15.250	13.750	3.00
12"	315mm	17.250	15.750	3.00
14"	355mm	18.500	17.000	3.00
16"	400mm	20.500	19.000	3.00

ProDuct - Fume Exhaust System

Notes: