

DIVERSIFIED AIR SYSTEMS, INC.

MAXFLO™

Fume Arms



- *No internal adjustment*
- *Smooth tubes, low static pressure*
- *Air volume damper included*
- *Self-locking joints*
- *2 grab handles for arm positioning*
- *Hood diverter increases capture velocity*
- *Shipped fully assembled*
- *5 different diameters*
- *Stainless steel tubes and hood available*

Superior technology generating substantial operating savings

MAXFLO *Articulated fume extractor arm*

Overhead canopies are a thing of the past. Workers were actually breathing the dust and smoke-filled air as it was travelling upward toward the canopy. Source capture is the safe and the right way to eliminate the harmful pollutants significantly that are the primary cause of lung diseases. MAXFLO fume arms are built to reduce the presence of industrial indoor air particles. From laboratories right up to the large welding shops, MAXFLO fume arms will get the job done.

Industrial Air Specialists

With our headquarters in Louisville, Kentucky, Diversified Air Systems, Inc. has been providing quality air solutions to industrial and commercial facilities since 1981. During our more than thirty years of operation, Diversified Air Systems, Inc. has established two important company traditions: offering state-of-the-art equipment at competitive prices and achieving long-term customer satisfaction.

The staff of Diversified Air Systems, Inc. includes five application engineers, with a combined experience of more than 75 years in the air filtration and HVAC industry. Whether your facility requires an air filtration system for dust, mist, or fumes, or an HVAC solution to meet ventilation needs, Diversified Air Systems, Inc. has the equipment and expertise to meet the need.

Services include air quality analysis, system design, equipment sales, turnkey installation, onsite servicing, and supply of replacement filters and accessories.

Other Filtration Systems available:

Air Cleaners

Containment Booths

Decontamination Booths

Downdraft Tables

Dust Collectors

Fans and Blowers

Gas & Odor Control

High Vacuum Systems

Mist Collectors

Paint Booths

Stainless Steel Collectors

Vehicle Exhaust Systems

Wet Dust Collectors



MAXFLO A FULL LINE OF ARTICULATED FUME EXTRACTOR ARMS

Efficient, robust and easy to handle

Most of our competitors do not include these standard features:

- Highly functional design facilitates fume arm handling and ease of movement.
- All supports and articulation joints are outside of the fume arm. The inside is smooth, without any obstacles that could reduce air flow, accumulate deposits and increase internal friction, which consume energy unnecessarily.
- External supports and articulation joints are readily accessible, easy to adjust and require no maintenance.
- Air diverter in hood significantly increases dust and smoke capture velocity.
- The unique design of the robust and durable top pivot made of steel makes 360° rotation easy.
- The MAXFLO steel tube fume arm is far more spark-resistant than constructions with a flexible hose.
- All MAXFLO arms are delivered pre-assembled and adjusted, ready for rapid installation and operation.

THE MAXFLO FUME EXTRACTOR ARM HAS ARRIVED...

MULTI-APPLICATION EQUIPMENT

- Welding • Gouging • Dusts • Cutting • Grinding
- Fumes • Extrusion lines • Gases



Table/bench mount model

TYPICAL APPLICATIONS FOR THE MAXFLO FUME ARMS



3" [75 MM] AND 4" [100 MM]

- Laboratories
- Research facilities
- Beauty parlors
- Small dust applications
- Museums
- Soldering
- Light welding

3" arms available in 3' [1 m] and 5' [1.5 m] models

4" arms available in 5' [1.5 m], 7' [2 m] and 8' [2.5 m] models

5" [125 MM]

6" [160 MM]

8" [200 MM]

- Medium to heavy welding
- Heavy smoke
- Plasma cutting
- Grinding and sanding
- Foundries
- Large dusts applications
- Gouging

These arms are available in 7' [2 m], 10' [3 m] and 14' [4 m] lengths



Hanging model

STAINLESS STEEL ARMS (ALL DIAMETERS AND ALL LENGTHS) SPECIALLY DESIGNED FOR:

- Pharmaceutical • Food processing
- Caustics • Corrosive gases
- Solvent fumes • Laboratories
- High temperature • High humidity
- Aggressive applications
- F.D.A. hose available

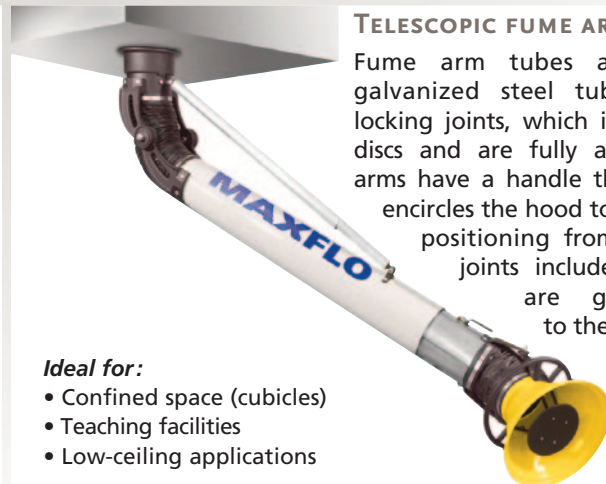


304 stainless steel model (luster finish)

Also available in 316 (brushed finish)

TELESCOPIC FUME ARMS

Fume arm tubes are made of galvanized steel tubes with self locking joints, which include friction discs and are fully adjustable. The arms have a handle that completely encircles the hood to facilitate easy positioning from all sides. All joints include hoses which are gear clamped to the tubes.



Ideal for:

- Confined space (cubicles)
- Teaching facilities
- Low-ceiling applications

Telescopic fume arms are available in 4", 5" and 6" diameters.

Telescopic action is 52" to 72"

OUTSTANDING MAXFLO STANDARD FEATURES



GENERAL DESCRIPTION

Standard fume arm tubes are made of steel with external cast aluminum joints, which include friction discs and are fully adjustable. The arms have a handle that completely encircles the hood to facilitate easy positioning. Aluminum hood diameters vary from 7" on the 3" arms, to 13" on the 6" and the 8" arms. All joints include a 275°F (135°C) hoses, which are gear clamped to the tubes. All hoods may be fitted with an optional 24 V. LED light kit and/or fan start/stop switches. The hood diverter (except on 3" arms) increases capture velocity. MAXFLO self-locking arms can be combined with several accessories to provide the best solution to specific problems.

A large variety of hoods can be manufactured to suit particular requirements. Tubes are also available in PVC, aluminium, 304 stainless steel (luster finish) or 316 stainless steel (brushed finish). Custom colors for arm tubes are available on request (minimum quantity required).

MODEL NUMBERS

HANGING AND TABLE/BENCH MOUNT

CHART 1

Hanging	Bench mount	Stainless steel hanging	Stainless steel bench mount	Arm diameter [inches] / [mm]	Arm length [feet] / [m]	Standard hood diameter [inches] / [mm]	Optional hood diameter [inches] / [mm]	Weight [lbs] / [kg]
FA-1HPG3-03	FA-1PPG3-03	FA-1HSS3-03	FA-1PSS3-03	3 / 75	3 / 1.0	7 / 185	–	14 / 6.3
FA-1HPG3-05	FA-1PPG3-05	FA-1HSS3-05	FA-1PSS3-03	3 / 75	5 / 1.5	7 / 185	–	16 / 7.2
FA-1HPG4-05	FA-1PPG4-05	FA-1HSS4-05	FA-1PSS4-05	4 / 100	5 / 1.5	8 / 200	–	17 / 7.7
FA-1HPG4-07	FA-1PPG4-07	FA-1HSS4-07	FA-1PSS4-07	4 / 100	7 / 2.0	8 / 200	–	19 / 8.6
FA-1HPG4-08	FA-1PPG4-08	FA-1HSS4-08	FA-1PSS4-08	4 / 100	8.5 / 2.5	8 / 200	–	22 / 10
FA-1HPG5-07	FA-1PPG5-07	FA-1HSS5-07	FA-1PSS5-07	5 / 125	7 / 2.0	10 / 250	15 / 375	38 / 17.2
FA-1HPG5-10	FA-1PPG5-10	FA-1HSS5-10	FA-1PSS5-10	5 / 125	10 / 3.0	10 / 250	15 / 375	43 / 19.5
FA-1HPG5-14	FA-1PPG5-14	FA-1HSS5-14	FA-1PSS5-14	5 / 125	14 / 4.0	10 / 250	15 / 375	47 / 21.3
FA-1HPG6-07	FA-1PPG6-07	FA-1HSS6-07	FA-1PSS6-07	6 / 160	7 / 2.0	13 / 315	20 / 500	44 / 20
FA-1HPG6-10	FA-1PPG6-10	FA-1HSS6-10	FA-1PSS6-10	6 / 160	10 / 3.0	13 / 315	20 / 500	52 / 23.5
FA-1HPG6-14	FA-1PPG6-14	FA-1HSS6-14	FA-1PSS6-14	6 / 160	14 / 4.0	13 / 315	20 / 500	60 / 27.2
FA-1HPG8-07	FA-1PPG8-07	FA-1HSS8-07	FA-1PSS8-07	8 / 200	7 / 2.0	13 / 315	20 / 500	57 / 26
FA-1HPG8-10	FA-1PPG8-10	FA-1HSS8-10	FA-1PSS8-10	8 / 200	10 / 3.0	13 / 315	20 / 500	66 / 30
FA-1HPG8-14	FA-1PG8-14	FA-1HSS8-14	FA-1PSS8-14	8 / 200	14 / 4.0	13 / 315	20 / 500	74 / 33.5

Telescopic fume arm

CHART 2

Models	Arm diameter [inches] / [mm]	Arm min. length [in] / [mm]	Arm max. length [in] / [mm]	Standard hood diameter [in] / [mm]	Optional hood diameter [in] / [mm]	Weight [lbs] / [kg]
FA-1TPGG4-06	4 / 100	52 / 1300	72 / 1800	8 / 200	-	19 / 8.6
FA-1TPGG5-06	5 / 125	52 / 1300	72 / 1800	10 / 250	15"	30 / 13.6
FA-1TPGG6-06	6 / 160	52 / 1300	72 / 1800	13 / 325	20"	36 / 16.4

Recommended air flow per arm

CHART 3

Arm diameter [inches] / [mm]	CFM	L/s
3 / 75	125 / 200	60 / 95
4 / 100	150 / 350	70 / 165
5 / 125	350 / 550	165 / 260
6 / 160	600 / 800	280 / 380
8 / 200	800 / 1400	380 / 660

Recommended fan selection for single arm application

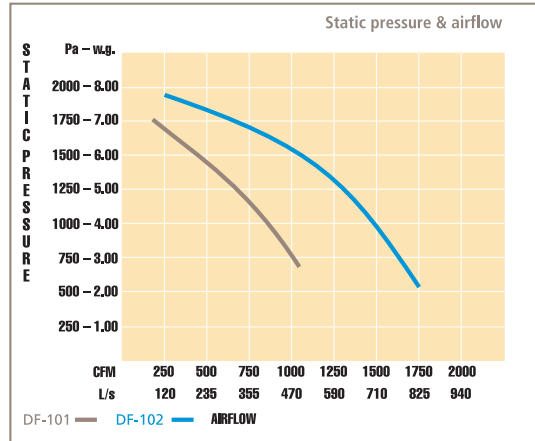
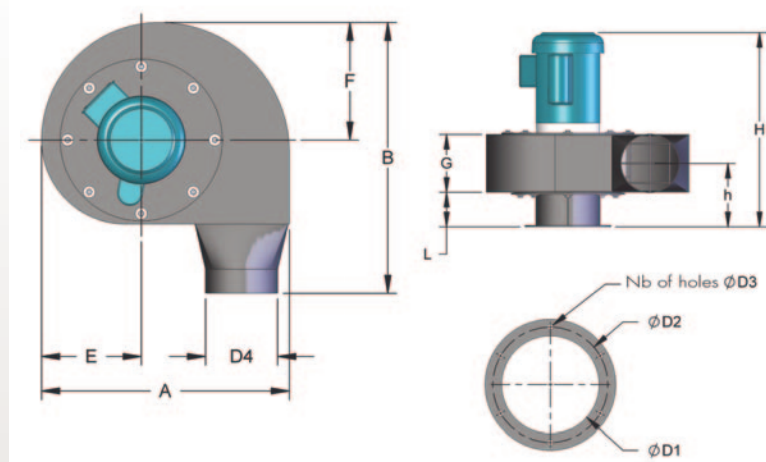
CHART 4

Arm diameter [inches] / [mm]	Fan model	HP / KW
3 / 75	DFR-18	0.33 / 0.25
4 / 100	DFR-19	0.33 / 0.25
5 / 125	DFR-111	1 / 0.75
6 / 160	DF-101	1 / 0.75
8 / 200	DF-102	2 / 1.50

Note: installation must be made according to local building codes and regulations.

MAXDRIVE FANS (3450 R.P.M.)

Backward inclined (recommended for 6" and 8" diameter arms [160mm and 200mm])



Fan dimensions

CHART 5

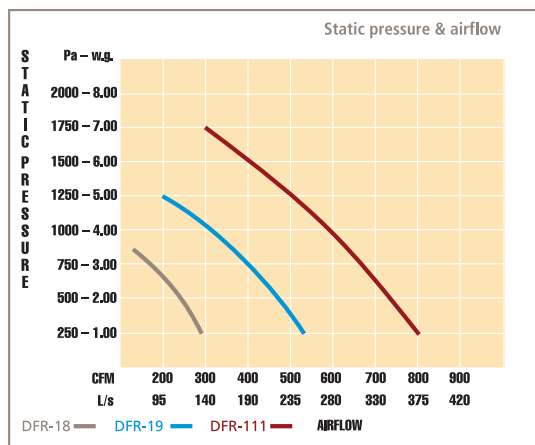
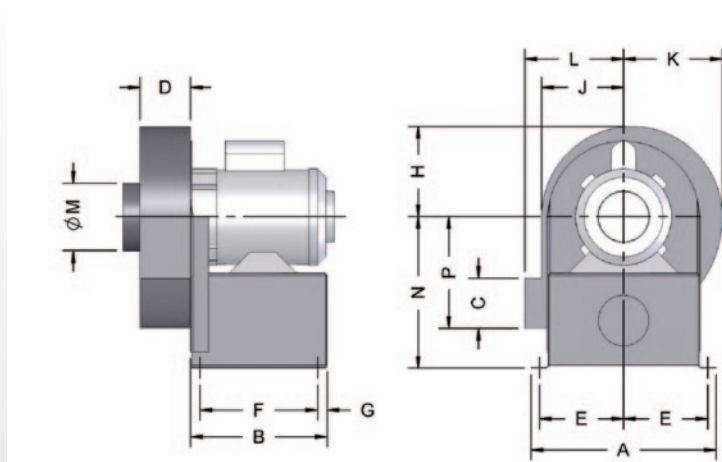
Model	Power [HP]	Dimensions [inches] / [mm]													Weight [lbs] / [kg]
		A	B	E	F	H	L	G	h	d1	d2	d3	d4	Nb	
DF-101	1 / 0.75	20.2 / 513	22.6 / 574	8.3 / 211	9.8 / 249	21.1 / 536	3.9 / 99	5.9 / 150	6.9 / 175	6.25 / 160	7.69 / 195	0.4 / 9	6 / 198	6	70 / 31.8
DF-102	2 / 1.50	22.7 / 577	24.8 / 630	9.2 / 234	11 / 279	24.8 / 630	4.9 / 124	6.3 / 160	7.4 / 188	8 / 200	9.69 / 246	0.4 / 9	8 / 249	8	82 / 37.3

Electrical note: fan motors indicated above are available in all voltages. Specify on order.

Technical note: refer to MAXDRIVE fan leaflet for complete data.

Recommended fans above are designed for arrangement as shown on page 9 of this leaflet.

Radial blade (recommended for 3", 4" and 5" diameter arms [75mm, 100mm and 125mm])



Fan dimensions

CHART 6

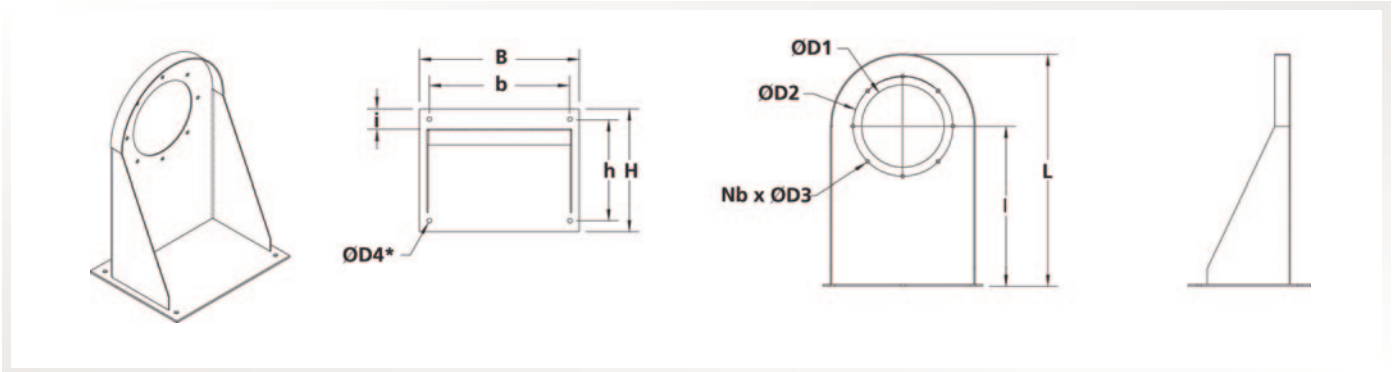
Model	[HP] / [KW]	Dimensions [inches] / [mm]														Weight [lbs] / [kg]
		A	B	C	D	E	F	G	H	J	K	L	M	N	P	
DFR-18	0.33 / 0.25	11 / 279	8 / 203	8 / 203	3 / 76	5 / 127	7 / 178	0.5 / 13	5.38 / 137	4.88 / 124	5.88 / 149	5.88 / 149	4 / 102	6.63 / 168	9 / 229	44 / 20
DFR-19	0.33 / 0.25	12.13 / 308	8 / 203	3.5 / 89	3.5 / 89	5.63 / 143	7 / 178	0.5 / 13	6.38 / 162	5.75 / 146	6.88 / 175	6.75 / 171	5 / 127	7.5 / 191	9.88 / 251	46 / 21
DFR-111	1 / 0.75	14.75 / 375	9 / 229	4 / 102	3.5 / 89	6.88 / 175	7.5 / 191	0.75 / 19	7.25 / 184	6.5 / 165	8 / 203	7.63 / 194	6 / 152	8.63 / 219	11.75 / 298	62 / 28

Electrical note: fan motors indicated above are available in 115/1/60.

Recommended fans above are designed for arrangement as shown on page 9 of this leaflet.

MAXFLO FUME ARM WALL AND BENCH MOUNTING BRACKET

Brackets shown below must be ordered separately.



Bracket shown above is designed to support arm only.

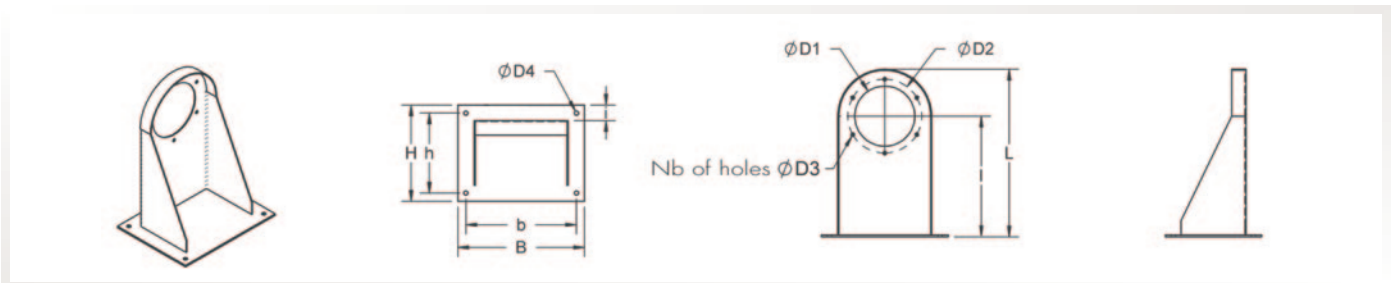
Arm bracket dimensions

CHART 7

Bracket type		Dimensions [inches] / [mm]													Weight [lbs] / [kg]
Painted steel	Stainless steel	Arm Diameter [in] / [mm]	D1	D2	Nb	D3	D4	L	I	H	h	B	b	i	
WBA-1003	WBA-15S3	3 / 75	3.00 / 75	4.38 / 111	4	0.28 / 7	0.38 / 10	6.69 / 170	3.94 / 100	3.94 / 100	2.75 / 70	5.43 / 138	4 / 101	-	1 / 0.45
WBA-1004	WBA-15S4	4 / 100	3.94 / 100	5.28 / 134	4	0.28 / 7	0.38 / 10	7.5 / 191	3.94 / 100	4.13 / 105	2.75 / 70	6.25 / 159	4.88 / 124	-	1 / 0.45

Note: dimensions indicated, are shown at closest decimal. Factory will supply exact dimensions with submittal.

FAN/ARM SUPPORT BRACKET DIMENSIONS



Bracket shown above is designed to support arm only, fan only or fan/arm arrangements.

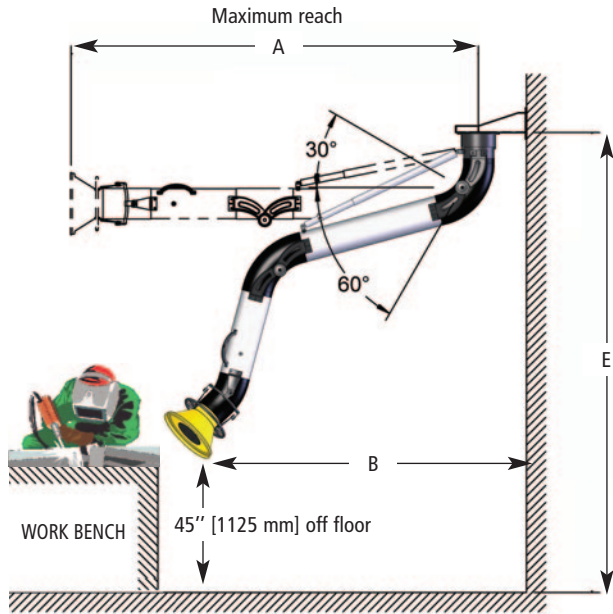
CHART 8

Model		Dimensions [inches] / [mm]													Weight [lbs] / [kg]
Painted steel	Stainless steel	Arm Diameter [in]/[mm]	D1	D2	Nb	D3	D4	L	I	H	h	B	b	i	
WBF-1005	WBF-15S5	5/125	5/127	6.5/165	6	0.28/7	0.43/11	17.44/443	12.56/319	10/254	8.25/210	13.25/337	11.25/286	1.75/44	5/2.3
WBF-1006	WBF-15S6	6/160	6/160	7.7/195	6	0.28/7	0.43/11	17.44/443	12.38/314	10/254	8.25/210	13.25/337	11.25/286	1.75/44	11/5
WBF-1008	WBF-15S8	8/200	8/200	9.7/246	8	0.35/9	0.43/11	22.3/567	15.41/391	11.75/298	9.75/248	15.38/391	13.38/340	2/51	13/5.9

Note: dimensions indicated are shown at closest decimal. Factory will supply exact dimensions with submittal.

MAXFLO MAXIMUM REACH FOR HANGING /BENCH MOUNT MODELS

MAXFLO — hanging model



MAXFLO — Table /bench mount model

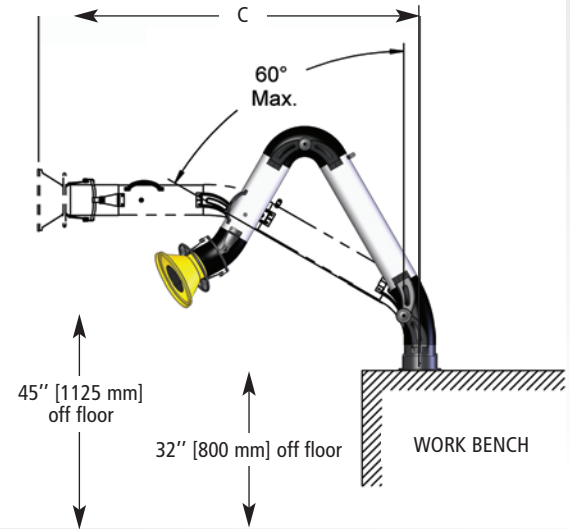
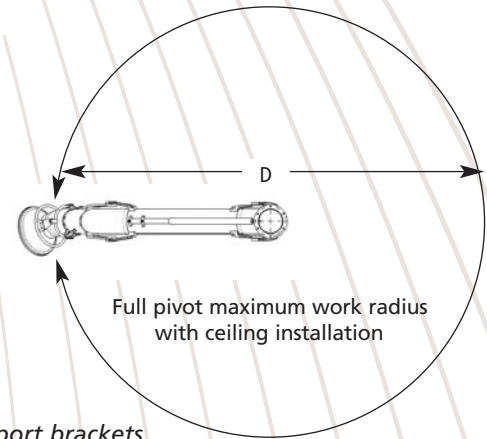


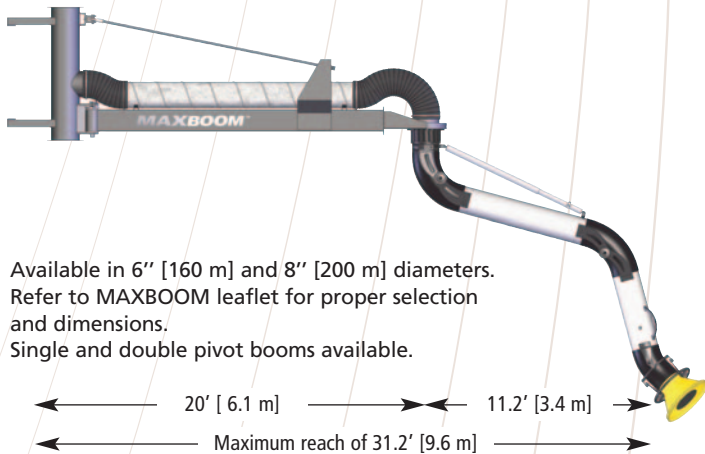
CHART 9

A Arm length [feet] / [m]	B Maximum reach at 45" off floor [feet] / [m]	C Maximum reach at 45" off floor [feet] / [m]	D Maximum reach at 45" off floor [feet] / [m]	E Recommended mounting height [feet] / [m]
3 / 0.9	2.6 / 0.7	3 / 0.9	5.2 / 1.4	6 / 1.5
5 / 1.5	3.5 / 1.1	5 / 1.5	7 / 2.2	6 / 1.5
7 / 2.1	5.5 / 1.7	7 / 2.1	11 / 3.4	6 / 1.5
8.5 / 2.6	7.4 / 2.2	7 / 2.6	14.8 / 4.4	8 / 2.4
10 / 3	8.5 / 2.6	7.8 / 2.4	17 / 5.2	8 / 2.4
14 / 4	11.2 / 3.4	10.2 / 3.2	22.4 / 6.8	8 / 2.4



Note on 14' (4 meters) long arms: reaches indicated in chart 9 are with WBF support brackets.

MAXFLO MAXIMUM REACH WITH EXTENSION BOOMS



Available in 6" [160 mm] and 8" [200 mm] diameters. Refer to MAXBOOM leaflet for proper selection and dimensions. Single and double pivot booms available.

*Source capture
has never been
so easy...
and efficient*



MAXFLO SINGLE FUME ARM AND MAXDRIVE FAN ARRANGEMENT



Available
in all diameters

*Typical installation
of source capture
arm for exhaust*

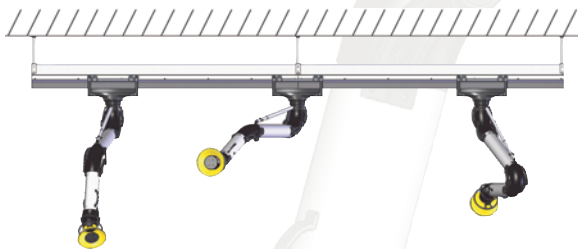
MAXFLO FUME ARM AND EXTENSION BOOM ARRANGEMENT



Available in 6" [160mm] and 8" [200mm]
diameters. Refer to MAXBOOM leaflet
for proper selection.

*Typical installation
of source capture arm
with extended reach*

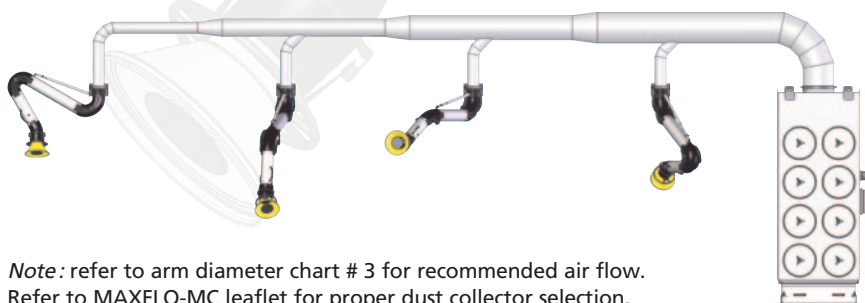
MAXFLO FUME ARM AND MAXRAIL DUCT/TROLLEY SYSTEM



Available trolleys for 3' [75mm] , 4" [100mm] , 5" [125mm]
and 6" [160mm] arms.

*Typical installation
of source capture arms
with sliding trolley*

MAXFLO FUME ARM WITH MAXFLO-HC DUST COLLECTOR ARRANGEMENT



*Note: refer to arm diameter chart # 3 for recommended air flow.
Refer to MAXFLO-MC leaflet for proper dust collector selection.*

*Typical installation of
source capture arms
and filtration*

OPTIONS

LED light kit (only) model FA-0000-71L

Fan switch (only) model FA-0000-71F

Light and fan switch model FA-0000-71LF

(options above supplied with 25' (7.5 M) of low voltage cable)

Optional fume arm hood mesh protection.

Galv. steel mesh model : HW-WM1/2

Stainless steel mesh model: HW-WMSS1/2

NZ-1FHM magnet base aluminum fume exhaust hoods, aluminum 1/2" mesh, grab handle and edge trim.

Options: flexible hose for duct connection, air volume damper. Available in 3", 4", 5", 6", 8" inlet diameters.



Electrical note: 24 V transformer and/or starter needed for light kit and fan operation not included. Contact factory for proper selection and model number.

Note: light kit and fan switch are not recommended for stainless steel fume arm with wash down preventive maintenance.

Note: diverter and light kit assembly not available on 3" arms. Fan start/stop switch available.

Note: 3 watts LED light = 35 watts halogen = 162 lumens

MAXFLO FUME ARM EXTENSIONS AND FLOOR POSTS

Vertical floor posts (includes arm support bracket)



Models	Height [feet] / [m]	
VFP-106	6 / 1.85	For arms 7' [2.15m] long and less
VFP-108	8 / 2.6	For arms 8.5' to 14' [2.7 to 4 m] long

When ordered, add suffix digits according to arm diameter.

Ex.: VFP-108-06 refers to 8' high post and for 6" diameter arm

Horizontal fixed extensions (includes arm support bracket)



Ceiling support extensions



Models	Height [inches] / [mm]
CSE-130	30/750
CSE-136	36/900
CSE-142	42/1050

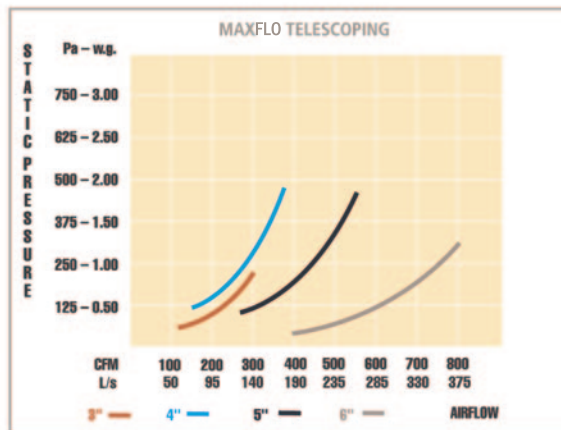
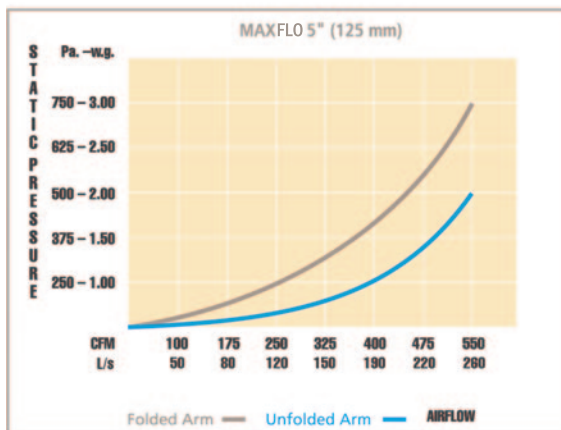
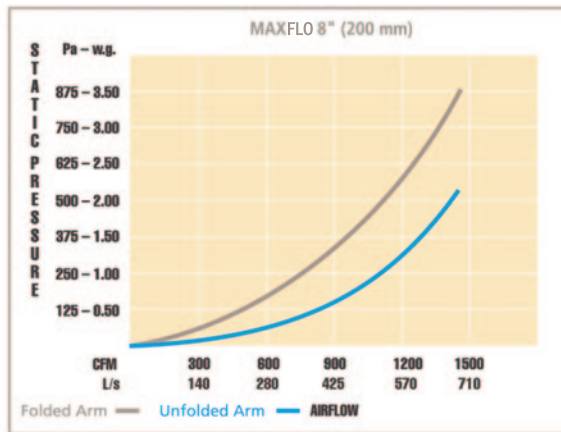
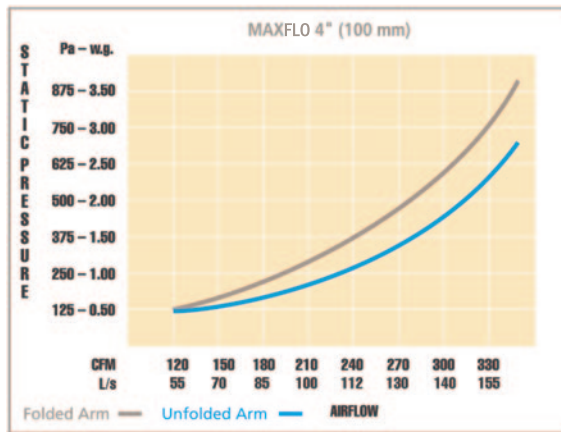
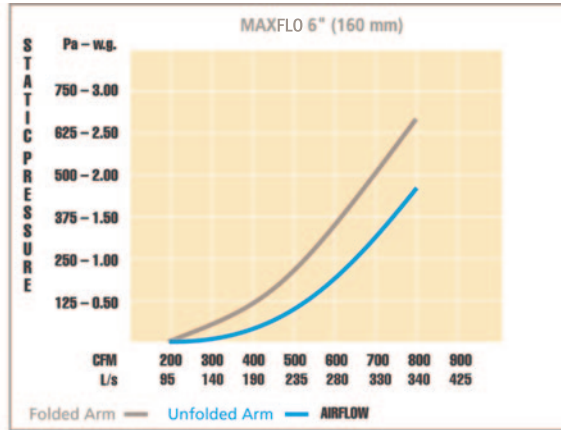
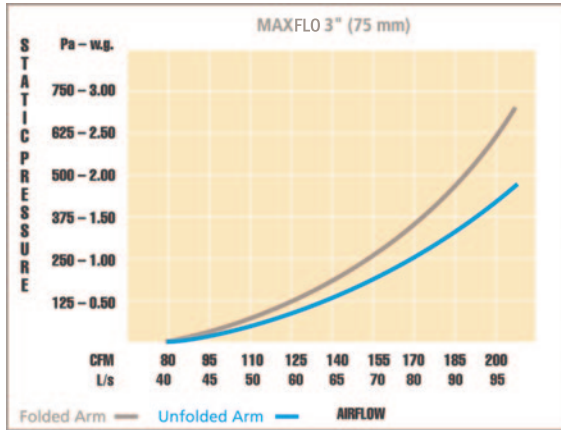
When ordered, add suffix digits according to arm diameter. Ex: CSE-136-06 refers to 36" vertical and for 6" diameter arm.

Models	Length [feet] / [m]
HFE-102	2 / 0.6
HFE-104	4 / 1.25

When ordered, add suffix digits according to arm diameter. Ex.: HFE-104-06 refers to 4' long and for 6" diameter arm.

Installation note: refer to local building laws prior to installation. Support structure has to meet sturdiness and weight of equipment.

STATIC PRESSURE & AIRFLOW



Note: MAXFLO fume arms are available in different lengths but have minimal variation in static pressure curves indicated above.

OPTIONS

- LED light kits on fume hoods
- Fan control switch on the hood
- High temperature or F.D.A. hoses at joints
- Vertical floor posts
- Wall and ceiling extension posts
- MAXBOOM pivot booms (up to 20' / 6 m)
- Protective wire mesh in hood
- Fan mounted above arm bracket
- Larger or custom inlet hoods
- Custom colors (minimum quantities required)
- Grounding wire for static discharge (PVC arm tubes)

CREATE YOUR MAXFLO FUME ARM SPECIFICATION

1. FUME ARM SHOULD INCLUDE:

Fume arm should include an air volume damper with handle on hood tube, air diverter within the hood to increase inlet velocity (except on 3" arms), circular grab handle around the hood for positioning of the arm and a secondary hood tube grab handle for 5", 6" and 8" [125 -160 and 200 mm] diameter arms, encapsulated recoil spring for 7', 10' and 14' [2, 3 and 4 m] arms, tubes will be 26 steel gauge, powder coat painted grey, flexible hose at arm joints will be thermal plastic rubber 275°F [135°C], fume arm joints will be powder coat painted steel for 3" and 4" diameter arms, powder coat painted cast aluminum for 5", 6" and 8" diameter arms, joint wheel for rotation and movement of fume hood.

2. FUME ARM SHOULD BE:

- A) hanging model
- B) bench mount model

3. FUME ARM SHOULD HAVE DIAMETER OF:

- A) 3" [75 mm] with 7" [175 mm] hood
- B) 4" [100 mm] with 8" [200 mm] hood
- C) 5" [125 mm] with 10" [250 mm] hood
- D) 6" [160 mm] with 13" [325 mm] hood
- E) 8" [200 mm] with 13" [325 mm] hood

4. 3" [75 MM] FUME ARM SHOULD HAVE LENGTH OF:

- A) 3' [0.9 m]
- B) 5' [1,5 m]

5. 4" [100 MM] FUME ARM SHOULD HAVE LENGTH OF:

- A) 5' [1,5 m]
- B) 7' [2,1 m]
- C) 8, 5' [2,5 m]

6. 5", 6" AND 8" [125, 160 AND 200 MM] FUME ARM SHOULD HAVE LENGTH OF:

- A) 7' [2 m]
- B) 10' [3 m]
- C) 14' [4 m]

7. FUME ARM SHOULD BE TELESCOPIC TYPE:

- A) FA-TPGG4-06 (4" telescopic 52" to 72)
- B) FA-TPGG5-06 (5" telescopic 52" to 72)
- C) FA-TPGG6-06 (6" telescopic 52" to 72)

8. FUME ARM TUBES SHOULD BE CONSTRUCTED OF:

Stainless steel with clear F.D.A. hoses
250°F, [120°C]

- A) 304 stainless steel
- B) 316 stainless steel

9. FUME ARM HOOD SHOULD HAVE A DIAMETER OF:

15" for 5" arms, 20" for 6" and 8" diameter arms in lieu of standard hood.

10. FUME ARM WILL BE SUPPLIED WITH:

- A) black powder coat painted steel bracket
- B) 304 stainless steel support bracket
- B) 316 stainless steel support bracket
- D) floor mounted vertical post
- E) wall mounted horizontal post
- F) ceiling mounted vertical post

11. FUME ARM WILL BE SUPPLIED WITH:

- A) 24V LED light kit with hood switch
- B) 24V fan control with hood switch
- C) 24V LED light kit and fan control hood switches
- D) galvanized steel wire mesh in hood
- E) stainless steel wire mesh in hood

12. SINGLE ARM / FAN INSTALLATION WILL INCLUDE:

- A) DFR-18 fan for 3" arm [115/1/60 only]
- B) DFR-19 fan for 4" arm [115/1/60 only]
- C) DFR-111 fan for 5" arm [115/1/60 only]
- D) DF-101 fan for 6" arm [specify voltage]
- E) DF-102 fan for 8" arm [specify voltage]

13. OVAL MAGNET BASE HOOD FOR FUME CAPTURE:

- A) 3" inlet with 3" x 6" oval hood
- B) 4" inlet with 4" x 8" oval hood
- C) 5" inlet with 5" x 10" oval hood
- D) 6" inlet with 6" x 12" oval hood
- E) 8" inlet with 8" x 14" oval hood
- F) hood air volume damper
- G) flexible hose for duct connection (refer to page 7 of MAXREEL leaflet for selection)

Note : specifications listed above may be modified to suit application. Contact D.A.S. or representative for information.

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