

DIVERSIFIED AIR SYSTEMS, INC.

# MAXDROP™

*Hose drop for fume and gases  
exhaust systems*



- *Easy to use and install*
- *Small cars to diesel trucks application*
- *Spring balancer with ratchet lock system*
- *Multiple hose diameter and temperature options*

*Superior technology generating substantial operating savings*

# MAXDROP™

*High-Productivity Innovative Products*

## **MAXDROP** *Hose drop for fume and gases exhaust systems*

The MAXDROP hose drop system is an interesting alternative to hose reels. Designed to work with small cars right up to big diesel engines, MAXDROP assures that the hoses will not be crushed by workers or vehicles since they are lifted and secured by the balancer. The ratchet lock system on the balancer allows the hose to be pulled at the exact length required. Single, dual or fan equipped systems are also offered with different diameters, lengths and temperature ratings of hoses. A variety of tailpipe adaptors is also offered depending on the application.

## *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 twenty-nine 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

## MAXDROP™ VERSATILITY FOR MULTIPLE APPLICATION

*Suitable for any application from ATV repair facilities right up to large truck maintenance shops*

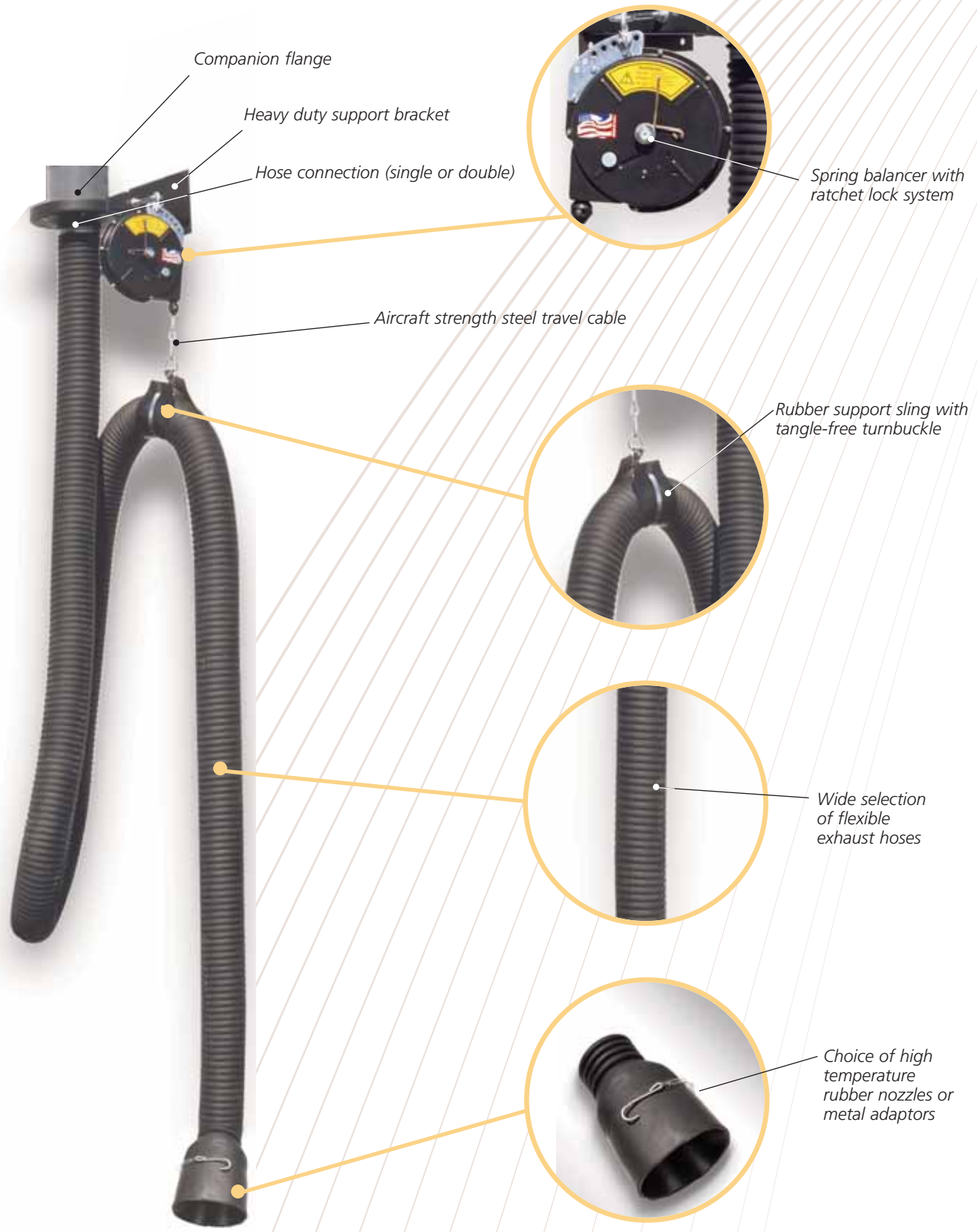
*Most of our competitors do not include these standard features :*

- Balancer ensures the flexible hose does not rest on floor and risks of being crushed
- Available with direct mount fan
- Can also be used for removing harsh fumes in tanks or containers
- Hoses available in different diameters, temperature ratings and lengths
- Wide variety of tailpipe adaptors
- Full kit for easy installation

## TYPICAL MAXDROP POSSIBILITIES AND ARRANGEMENTS



**OUTSTANDING MAXDROP FEATURES**



## MAXDROP HOSE DROP

### Model numbers

HDSB	HDSP	Hddb
HDSB-1416	HDSP-1416	Hddb-1416
HDSB-1416-HT	HDSP-1416-HT	Hddb-1416-HT
HDSB-1425	HDSP-1425	Hddb-1425
HDSB-1425-HT	HDSP-1425-HT	Hddb-1425-HT
HDSB-1516	HDSP-1516	Hddb-1516
HDSB-1516-HT	HDSP-1516-HT	Hddb-1516-HT
HDSB-1525	HDSP-1525	Hddb-1525
HDSB-1525-HT	HDSP-1525-HT	Hddb-1525-HT
HDSB-1616	HDSP-1616	Hddb-1616
HDSB-1616-HT	HDSP-1616-HT	Hddb-1616-HT
HDSB-1625	HDSP-1625	Hddb-1625
HDSB-1625-HT	HDSP-1625-HT	Hddb-1625-HT
HDSB-1816	HDSP-1816	Hddb-1816
HDSB-1816-HT	HDSP-1816-HT	Hddb-1816-HT
HDSB-1825	HDSP-1825	Hddb-1825
HDSB-1825-HT	HDSP-1825-HT	Hddb-1825-HT

### Hose drop model selection system

**HDSB** stands for **H**ose **D**rop **S**ingle with **B**alancer  
**Hddb** stands for **H**ose **D**rop **D**ouble with **B**alancer  
**HDSP** stands for **H**ose **D**rop **S**ingle with **P**ulleys

Digits following the hose drop model stand for (1) hose support sling, diameter and length of flexible hose such as: **1416** is **4"** (100 mm) x **16'** (5 Meters) hose

Letters **HT** following the description of hose stand for **H**igh **T**emperature (Max 700° F or 370° C.)

**Example:** hose drop model **HDSB-1616-HT** would be a **H**ose **D**rop **S**ingle with **B**alancer, (1) hose support sling, 6" (150mm) x 16' (5 Meters) flexible hose, high temperature.

Substitute letters **HT** for **ET** for extreme temperature application: 900 °F [480 °C]

CHART 1

Models	Recommended mounting heights
with 16' [5 M] of hose:	10 – 12' [3 to 3,7 M]
with 25' [7,5 M] of hose:	12 – 16' [3,7 to 4,9 M]

*Note:* Spring balancer has 15' (4,5 M) of travel cable. Spring balancer has lift capability of 15 lbs [7 KG].

*Lift capability note:* Stronger lift capabilities available with 30 lbs [14 KG] weight capacity.

Contact factory for details and pricing.

*Fan note:* Fan may be mounted above support bracket or remote. Contact factory for details.

### Tailpipe adaptors

Because of the wide variety of shapes and sizes on cars and trucks tailpipes, adaptors are not included in the numbering system above. Page 7 of this leaflet includes a complete list of available tailpipe adaptors and nozzles to be fitted with the MAXDROP hose drop systems.

#### Typical installation with fan and support bracket



#### Typical installation without fan and support bracket



*Dimensions note:* Due to various configurations of MAXDROP systems, dimensions and weight of equipment will be supplied on request.

CHART 2

Vehicle type	Recommended air volume CFM / M <sup>3</sup> H	Recommended hose diameter [inches] / [mm]	Recommended hose temperature [° F] / [° C]
Small to full size cars	250-300 / 425-500	4 / 100	200-300 / 120-150
Performance sports cars	450-500 / 765-850	4-5 / 100-125	500-600 / 260-325
Large pick-up trucks / SUV's	350-400 / 600-675	4-5 / 100-125	500-600 / 260-325
Diesel trucks / tractor trailers	700-800 / 1200-1350	6 / 150	500-600 / 260-325
Heavy duty off road machinery	800-1200 / 1200-1350	8 / 200	700-800 / 450-325

Some engines may exhaust fumes at higher temperatures than 900° F (480° C). Consult with engine or vehicle manufacturer's specifications.

**Please call 800-264-8958**

## MAXDRIVE FANS (3450 R.P.M.)

Backward inclined (recommended for 6" and 8" diameter drops [150mm and 200mm])

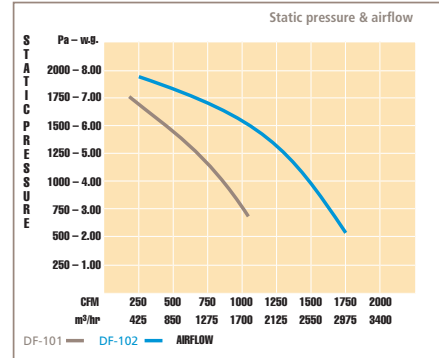
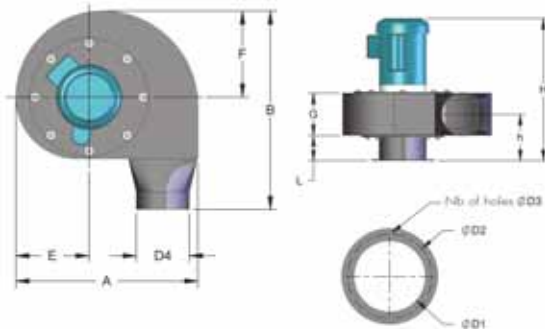


CHART 3

Model	Power [HP]	Dimension [inches] / [mm]											Weight [lbs] / [kg]		
		A	B	E	F	H	L	G	h	d1	d2	d3	d4	n	
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: Motors are available in all voltages. Specify on order.

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

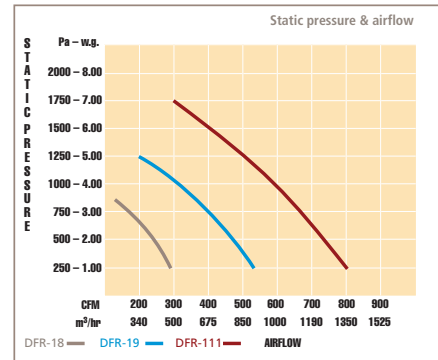
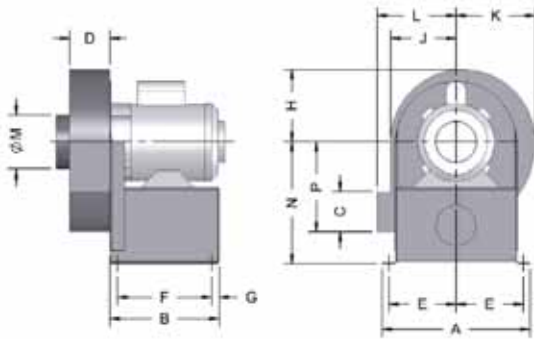


CHART 4

### Fan dimensions

Model	[HP] / [KW]	Dimension [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: Motors are available in all voltages. Specify on order.

Fan data	
Available voltages	115/230-1-60 208/460-3-60 575-3-60
Impeller type	Backward inclined (aluminum) for DF fans.Radial (steel) for DFR fans
Housing	steel (painted)
Motor	TEFC
R.P.M.	3450

Please call 800-264-8958

## TAILPIPE ADAPTORS & NOZZLES

Rubber adaptors  
protect chrome tailpipes

**NZR-1TPA3000**



Designed for split tailpipes up to 3" (75mm) in diameter. (crush-resistant)

**NZR-1TWINFLAP**



4" X 9" (100mm X 225 mm) rubber nozzle equipped with closing flaps minimizing air loss.

**NZR-1F400**



Straight adaptors with hook and chain. Up to 3,5" (90mm) in diameter. (crush-resistant)

**NZR-1F475**



3" X 6" (75x150mm) oval shaped for dual tailpipes. Attached to tailpipe by means of hook and chain. (crush-resistant)

**NZR-1F575**



3,5" x 8,5" (90x215mm) oval shaped for larger dual tailpipes. Attached to tailpipe by means of hook and chain. (crush-resistant)

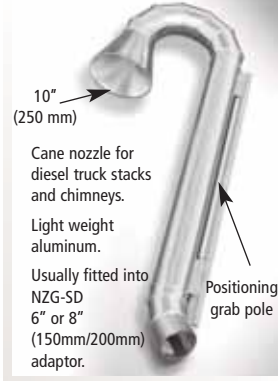
**NZR-1RA250-300**



Fits most car and light truck tailpipe sizes. Attached to tailpipe by means of cuffs and slots. (crush-resistant)

Galvanized or stainless steel  
tailpipe adaptors

**NZ-1DC**



10" (250 mm)  
Cane nozzle for diesel truck stacks and chimneys.  
Light weight aluminum.  
Usually fitted into NZG-SD 6" or 8" (150mm/200mm) adaptor.

**NZ-1POLE**

Telescopic aluminium pole (8" to 16') with grab hook. Recommended when hose and nozzle are fully wrapped around the drum and is out of arm's reach. Nozzle below is fitted with 2" eyebolt for grab hook and pole insert

**NZG-1OE-IH**



**NZG-1SD**



Spring loaded damper type. Available from 4" to 8" (100 to 200mm).

**NZG-1SLEA**



Spring loaded damper type with port emission analyzer. Available from 4" to 8" (100 to 200mm).

**NZG-1VG**



Available with or without spring loaded damper type with vise-grip attachment. Available from 4" to 8" (100 to 200 mm). Required for high RPM testing facilities.

**NZG-1OE**



Open nozzle adaptor. No tailpipe attachment included. Available from 4" to 8" (100 to 200mm).

## MAXDROP HOSES

### Flexible hoses

CHART 4

Model	Maximum temperature	Fabric [inches] / [mm]	Usage / Application	Diameters
HO-1240H-X	240-300° F / 115-135° C	Cotton neoprene with exterior helix	Cars-light trucks	3 to 8" (75 to 200 mm)
HO-1500H-X	500-700° F / 260-370° C	Silicone fiberglass with exterior helix	High revolution engines, diesel trucks	3 to 8" (75 to 200 mm)
HO-1900H-X	900-1000° F / 480-535° C	E-glass polyurethane with exterior helix	Quarry and heavy duty machinery	3 to 8" (75 to 200 mm)
HO-11200H-X	1200-1350° F / 650-730° C	2 ply E-glass polyurethane with exterior helix	Extreme temperature	3 to 8" (75 to 200 mm)

**HO-1240H-X**



**HO-1900H-X**



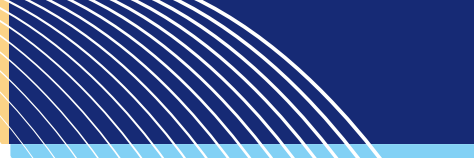
**HO-1500H-X**



**HO-11200H-X**



Note: X digit at end of model number indicates hose diameter. Ex.: HO-1500H-6 equals to a 6" diameter hose. Specify length required.



**Options for MAXDROP systems**

- MAXBOOM extension swing booms
- Micro-switch on balancer (electrical control box required)
- MAXRAIL trolley systems
- Explosion-proof motors for fans
- Fan starters
- Heavy duty spring balancers (up to 30 lb [13.5kg])

**CREATE YOUR MAXDROP EXHAUST DROP SYSTEM**

**1. HOSE DROP SHOULD INCLUDE HOSE DIAMETER OF:**

- A) 3" [75mm]
- B) 4" [100mm]
- C) 5" [125mm]
- D) 6" [150mm]
- E) 8" [200mm]

**2. HOSE DROP SHOULD INCLUDE HOSE LENGTH OF:**

A) ( \_\_\_" ) ( \_\_\_M) Select desired length

**3. HOSE DROP SHOULD INCLUDE HOSE MODEL NUMBER:**

- A) HO-1240H-X
- B) HO-1500H-X
- C) HO-1900H-X
- D) HO-11200H-X

**4. HOSE DROP SHOULD INCLUDE LIFTING SYSTEM BY MEANS OF:**

- A) torque reel with 15' (4,6M) travel cable with ratchet lock
- B) torque reel with 15' (4,6M) travel cable with ratchet lock and micro-switch for automatic fan start/stop
- B) double pulley system with wall cleats

**5. Hose drop should include support bracket for appropriate diameter of hoses and components**

**7. HOSE DROP SHOULD INCLUDE FAN MODEL:**

Refer to recommended fan selection in this leaflet (page 6)

**8. HOSE DROP SHOULD INCLUDE TAILPIPE ADAPTORS MODEL:**

Selection to be made from list of available adaptors in this leaflet (page 7).

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

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