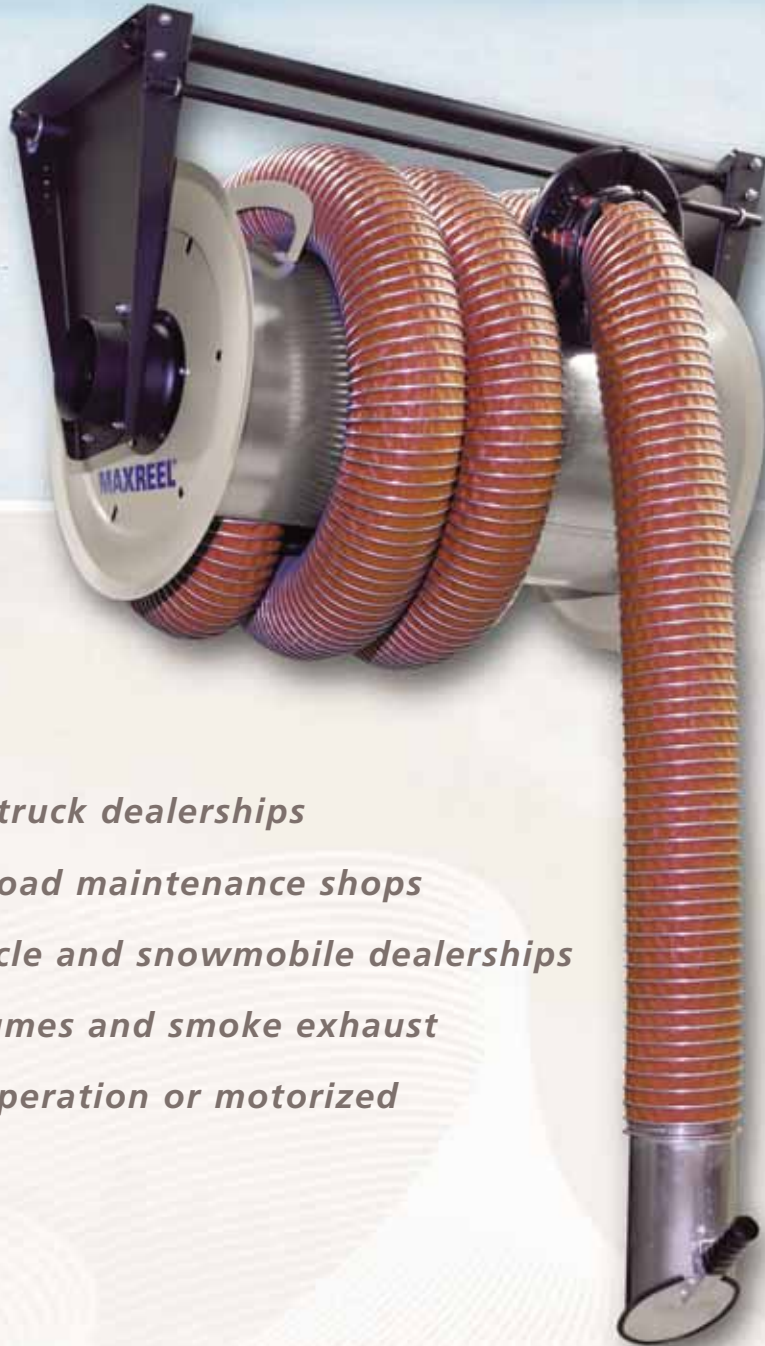


DIVERSIFIED AIR SYSTEMS, INC.

**MAXREEL™**

*Exhaust hose reels*



- *Car and truck dealerships*
- *RV, off-road maintenance shops*
- *Motorcycle and snowmobile dealerships*
- *Diesel fumes and smoke exhaust*
- *Spring operation or motorized*

*Superior technology generating substantial operating savings*

# MAXREEL™

*High-Productivity Innovative Products*

## **MAXREEL** *Fume and gases exhaust hose reels*

Car and truck maintenance facilities are often confronted with the presence of fumes and gases produced while the engines are running during tune-up or repairs. The MAXREEL fume extraction system is well adapted to capture the deadly pollutants emitted from combustion engines. Made of rugged rolled steel components, the MAXREEL recoils the flexible hose around the drum when not in use. A heavy duty dual spring pack with ratchet lock mechanism is located on the side of the reel. Optional motor driven reels with radio signal control is also available along with a fan mounted directly on the hose reels. A central fan can also be used for multiple reels installation. Fitted directly on the automobile tailpipe or truck stack, the different available nozzles can be made of steel, stainless steel, aluminum or rubber. Depending on the application, hoses are available in 3' (100 mm), 4" (100 mm), 5" (125 mm) and 6" (150 mm) diameters. Hose reels can also take up to 42' (13M) of hose. High temperature hoses (up to 2000o F / 1100o C) are offered for extreme duty 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

**MAXREEL™ SIMPLY BECAUSE ENGINE FUMES NEED TO BE EXHAUSTED**

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

- Heavy gauge steel construction
- 3"(75mm), 4"(100mm), 5"(125mm), 6"(150mm) and 8"(200mm) diameter hoses
- DUAL heavy duty tempered steel spring pack
- Powder coat painted and galvanized steel components
- Hose temperature up to 2000 deg. F. (1100 deg. C)
- E.Z. lock ratchet lock mechanism or motorized operation
- Hose storage capacity up to 42' (13m)
- Shipped fully assembled

**MAXREEL EXHAUST EXHAUST HOSE REEL TYPICAL INSTALLATION AND APPLICATION**

*Superior technology  
generating substantial  
operating savings*



*High temperature hose with truck stack aluminum cane nozzle.*



*MAXREEL equipped with direct mount MAXDRIVE fan (adjustable air discharge).*



*MAXREEL equipped with MAXBOOM single pivot boom.*

**OUTSTANDING MAXREEL FEATURES** *Motorized model is highly recommended for plants with overhead cranes.*

**Spring recoil model**



**Motorized model control options**



Wireless radio signal transmitter (UP/DOWN/STOP)  
**Model # 140**

Pendant 3 way rotary switch (UP/DOWN/STOP)  
**Model # 150**

Pendant 3 way rotary switch with fan control (UP/DOWN/STOP) (FAN START/STOP)  
**Model # 160**

Wall mounted 3 way rotary switch (UP/DOWN/STOP)  
**Model # 170**

Wall mounted 3 way rotary switch with fan control (UP/DOWN/STOP) (FAN START/STOP)  
**Model # 180**

## MAXREEL DRUM WIDTH DIMENSIONS (MOTORIZED AND SPRING RECOIL MODELS)



Drum width [inches] / [mm]	Dimensions [inches] / [mm]										Weight without hose [lbs] / [kg]
	A1	A2	H	L1	S1	L2	S2	J	D1	D2	
24 / 600	As per diameter of hose selected	25.5/648	32.5/826	32.8/820	18.8/476	30/750	12.3/311	18.4/467	6/152	0.5/13	65/30
34 / 850		25.5/648	32.5/826	43.8/1111	18.8/476	41/1041	12.3/311	18.4/467	6/152	0.5/13	105/48
39 / 975		25.5/648	32.5/826	48.8/1238	18.8/476	46/1168	12.3/311	18.4/467	6/152	0.5/13	115/52
45 / 1125 (with 6" hose)		25.5/648	32.5/826	54.8/1370	18.8/476	52/1300	12.3/311	18.4/467	6/152	0.5/13	160/73
45 / 1125 (with 8" hose)		25.5/648	34.5/862	54.8/1370	18.8/476	52/1300	12.3/311	20.4/467	8/200	0.5/13	160/73

24" wide hose reel available in spring version only.

CHART 1

### Hose Reel model selection system

To select hose reel model, use numbering system as follows:

**HR** = Hose Reel (standard spring return)

**HRM** = Hose Reel Motorized

(with pendant or wall mounted switch)

**HRMW** = Hose Reel Motorized Wireless

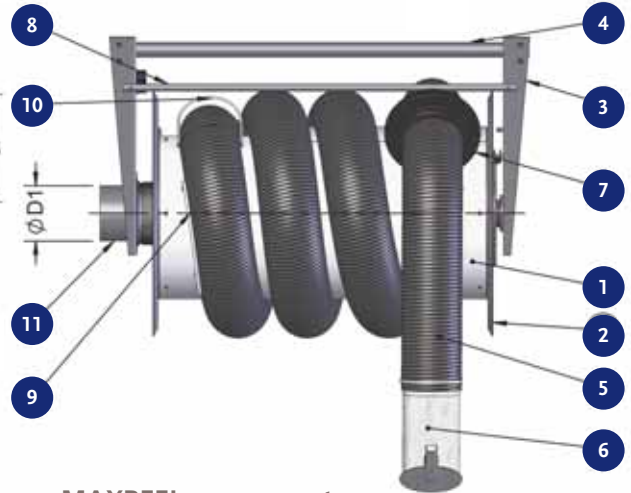
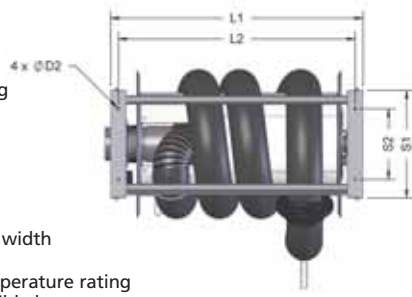
(radio signal handset)

First set of three (3) digits = single drum width

Third digit = hose diameter

Second set of three (3) digits = hose temperature rating

Last set of two (2) digits = length of flexible hose



### MAXREEL components

- |                       |  |
|-----------------------|--|
| 1. Drum               | 7. Hose stop (not needed on motorized model) |
| 2. Sheaf              | 8. Hose stop bar                             |
| 3. Side panel         | 9. Hose guide                                |
| 4. Structural tubings | 10. Hose support (U-bolt)                    |
| 5. Flexible hose      | 11. Air outlet                               |
| 6. Nozzle             |  |

### EX # 1: HRMW-139650025

means hose reel, motorized, wireless radio signal, 39" wide drum, 6" diameter hose, 500 deg F temperature rating of hose, 25' of hose

**For motorized hose reel operation without radio signal handset, make selection of wall or pendant switch in page 4 of this leaflet**

### EX # 2: HR-124424025

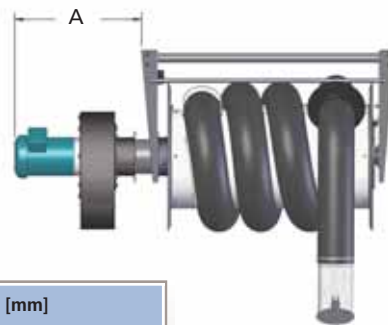
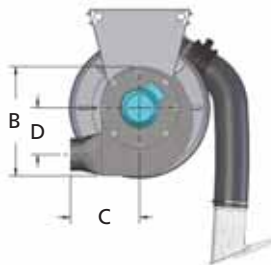
means hose reel, (standard spring return), 24" wide drum, 4" diameter hose, 240 deg F temperature rating of hose, 25' of hose

### Drum width selection

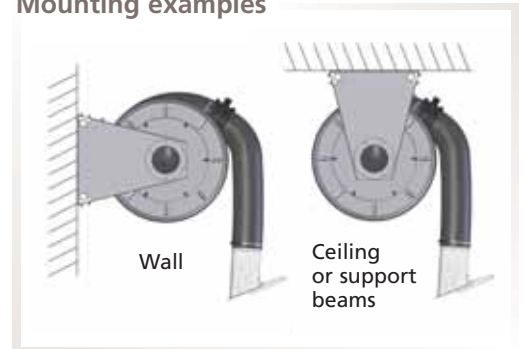
CHART 2

Hose diameter (inches)	Hose length (feet)	Drum width (inches)
3	25	24
	35	24
4	25	24
	35	34
5	25	24
	35	34
6	25	34
	35	39
8	25	34
	35	45

## MAXREEL DIMENSIONS WITH DIRECT MOUNT MAXDRIVE FAN (MOTORIZED AND SPRING RECOIL MODELS)



### Mounting examples



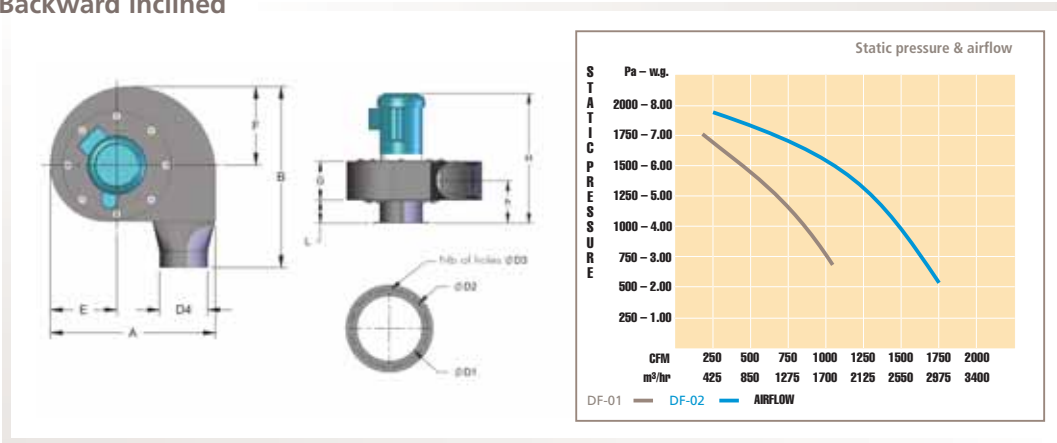
Models	Dimensions [inches] / [mm]			
	A	B	C	D
1 H.P.	22.25/555	20.19/505	12.76/320	8.52/215
2 H.P.	25.95/650	22.50/560	13.62/340	9.10/225

### Note: HOSE REEL INSTALLATION:

To ensure proper installation, refer to local building laws and requirements. Support structure has to meet sturdiness and reliability for weight and torque of reel with accessories.

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

Backward inclined



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

### Fan dimensions

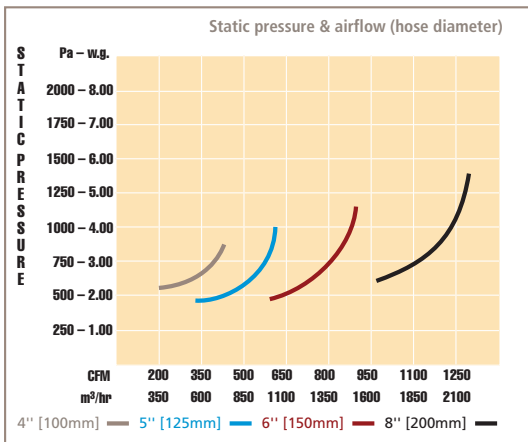
CHART 3

Model	Power [HP]	Dimension [inches] / [mm]											Weight [lbs] / [kg]		
		A	B	E	F	H	L	G	h	d1	d2	d3		d4	n
DFI-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
DFI-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.

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

Temperature note: if exhaust temperature exceeds 400 °F [205 °C] with ambient air dilution, use powder coat painted steel impellers on MAXDRIVE fans.



Note: Static pressure drop indicated is with 75% of hose used. Pressure loss chart does not include exhaust ducting.

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 machinery	1000-1200 / 1700-2050	8 / 200	850 / 450

### Optional proximity sensor for automatic fan start/stop



### Recommended starters for reels equipped with proximity switches

CB 1100	Control box (single reel)
CB 1500	Control box (up to 5 reels)
CB 11000	Control box (up to 10 reels)
CB 12000	Control box (up to 20 reels)

## 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)

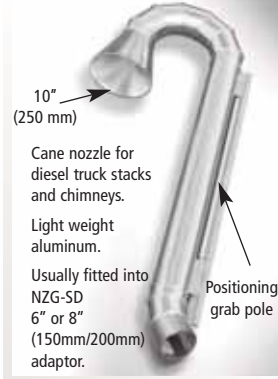
**NZR-1RA250-300**



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).

## MAXREEL 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

- Gravity or motorized dampers
- Proximity switches for automatic fan start/stop
- Powder coat painted impeller steel for high temperature application
- Fan starters

## CREATE YOUR MAXREEL EXHAUST HOSE REEL SPECIFICATION

<p>1. Hose reel should include structural parallel tubings for stability</p> <hr/> <p>2. Hose reel should include powder coat painted steel side panels and braces</p> <hr/> <p>3. Hose reel should include a guide bar for proper storage of hose</p> <hr/> <p>4. HOSE REEL SHOULD INCLUDE HOSE DIAMETER OF:</p> <p>A) 3" [75mm] <input type="checkbox"/></p> <p>B) 4" [100mm] <input type="checkbox"/></p> <p>C) 5" [125mm] <input type="checkbox"/></p> <p>D) 6" [150mm] <input type="checkbox"/></p> <p>E) 8" [200mm] <input type="checkbox"/></p> <p>5. HOSE REEL SHOULD HAVE STORAGE CAPACITY OF:</p> <p>A) ( ___ ") ( ___ M) Select desired length</p> <hr/> <p>6. HOSE REEL SHOULD INCLUDE HOSE MODEL:</p> <p>A) HO-1240H-X <input type="checkbox"/></p> <p>B) HO-1500H-X <input type="checkbox"/></p> <p>C) HO-1900H-X <input type="checkbox"/></p> <p>D) HO-11200H-X <input type="checkbox"/></p>	<p>7. HOSE REEL SHOULD INCLUDE DRUM ROTATION BY MEANS OF:</p> <p>A) dual tempered steel springs with ratchet lock <input type="checkbox"/></p> <p>B) direct drive tube motor [115-1-60] with radio remote transmitter <input type="checkbox"/></p> <p>C) direct drive tube motor [115-1-60] with pendant switch <input type="checkbox"/></p> <p>D) direct drive tube motor [115-1-60] with pendant switch and fan switch <input type="checkbox"/></p> <p>E) direct drive tube motor (115-1-60) with wall mounted switch <input type="checkbox"/></p> <p>F) direct drive tube motor (115-1-60) with wall mounted switch and fan switch <input type="checkbox"/></p> <p>8. HOSE REEL SHOULD INCLUDE DIRECT DRIVE MOUNTED FAN MODEL:</p> <p>A) DF-101 (voltage to be confirmed) <input type="checkbox"/></p> <p>B) DF-102 for 8" [200mm] reels only (voltage to be confirmed) <input type="checkbox"/></p> <p>C) proximity switch for automatic start/stop of fan <input type="checkbox"/></p> <p>D) control panel for reels equipped with proximity switches (see chart on page 6) <input type="checkbox"/></p> <p>9. HOSE REEL SHOULD INCLUDE TAILPIPE ADAPTORS MODEL:</p> <p>Selection to be made from list of available adaptors in this leaflet (page 7).</p> <hr/> <p>10. HOSE REEL SHOULD INCLUDE:</p> <p>A) flange connection to exhaust duct <input type="checkbox"/></p> <p>B) air outlet damper <input type="checkbox"/></p> <p>C) motorized air outlet damper <input type="checkbox"/></p>
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