Exhaust hose reels

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**  
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 2000°F / 1100°C) are offered for extreme duty application.

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**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

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Please call 800-264-8958
Simply because engine fumes need to be exhausted

Most of our competitors do not include these standard features:

- Heavy gauge steel construction
- Hose temperature up to 1200 °F (650 °C).
- E.Z. lock ratchet lock mechanism or motorized operation
- Multiple selection of hose capacity
- Shipped fully assembled
- Heavy duty tempered steel spring pack
- Powder coat painted and galvanized steel components

MAXREEL EXHAUST EXHAUST HOSE REEL TYPICAL INSTALLATION AND APPLICATION

High temperature hose with truck stack aluminum cane nozzle.

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

MAXREEL XL, extra large motorized version with 12” x 60’ flexible hose. Special design for high ceilings and high air volume.

MAXREEL equipped with MAXBOOM single pivot boom.

Note: refer to local building laws and requirements. Support structure has to meet sturdiness and reliability for weight and torque of reel with accessories.

Please call 800-264-8958
Outstanding MAXREEL features

Motorized model is highly recommended for plants with overhead cranes.

Spring recoil model

- Hose stop (for spring operated version and proximity sensors system)
- Structural parallel tubing
- Improved hose guide
- Painted steel side panels
- Painted steel sheaves
- Air outlet (optional fan or automatic damper)
- Galvanized steel drum
- E-Z ratchet lock system
- Spring system with cassette cover
- Flexible hose (different models available)

Motorized model control options

- Wireless radio signal transmitter
  (UP/DOWN/STOP)
  HRM-100-00-40
- Pendant 3 way rotary switch
  (UP/DOWN/STOP)
  HRM-100-00-50
- Pendant 3 way rotary switch with fan control
  (UP/DOWN/STOP)
  (FAN START/STOP)
  HRM-100-00-60
- Wall mounted 3 way rotary switch
  (UP/DOWN/STOP)
  (FAN START/STOP)
  HRM-100-00-70
- Wall mounted 3 way rotary switch
  (UP/DOWN/STOP)
  (FAN START/STOP)
  HRM-100-00-80

Note: maximum weight of flexible hose and nozzle can not exceed 20 lbs (9 kg) for hose reel model 240000. Maximum weight of flexible hose and nozzle can not exceed 55 lbs (25 kg) for hose reel models 340000, 390000 and 450000. If a heavier hose is necessary, DAS suggests heavy duty dual springs or motorized version. DAS will not be held responsible of reel performance if customer uses heavier flexible hose than maximum weight allowed.
Fumes and gases exhaust hose reel

**Dimensions (motorized and spring recoil models)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
</tr>
<tr>
<td>24 / 600</td>
<td>25.5/648</td>
<td>32.5/826</td>
</tr>
<tr>
<td>34 / 850</td>
<td>25.5/648</td>
<td>32.5/826</td>
</tr>
<tr>
<td>39 / 975</td>
<td>25.5/648</td>
<td>32.5/826</td>
</tr>
<tr>
<td>45 / 1125 (with 6&quot; hose)</td>
<td>25.5/648</td>
<td>32.5/826</td>
</tr>
<tr>
<td>45 / 1125 (with 8&quot; hose)</td>
<td>25.5/648</td>
<td>34.5/862</td>
</tr>
</tbody>
</table>

Hose reel model numbering 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 two (2) digits = drum width

Second digit = hose diameter

Second set of three (3) digits = hose temperature rating (for 500 °F hose with protective wearstrip, substitute 500 digits for 50W).

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

**EX # 1:** HRMW-139650025

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

**EX # 2:** HR-124424025

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

**MAXREEL components**

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

**MAXREEL WITH DIRECT MOUNTED FAN**

<table>
<thead>
<tr>
<th>Models</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 H.P.</td>
<td>22.25/555</td>
<td>20.19/505</td>
<td>12.76/320</td>
<td>8.52/215</td>
</tr>
<tr>
<td>2 H.P.</td>
<td>25.95/650</td>
<td>22.50/560</td>
<td>13.62/340</td>
<td>9.10/225</td>
</tr>
</tbody>
</table>

Note: MAXREEL with fan will be shipped top horizontal discharge unless specified otherwise by customer. Bottom horizontal discharge shown above.

**Note:** MAXREEL exhaust hose reel may be equipped with other than 25' or 35' hose length configurations. Contact factory for details.
**Fumes and gases exhaust hose reel**

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

**Backward inclined**

**Fan dimensions**

|-------|---------------|-----------------------------|---------------------|

**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, select high resistance painted steel impellers on MAXDRIVE fans.

**Vehicle type**

<table>
<thead>
<tr>
<th>Vehicle type</th>
<th>Recommended air volume [CFM / L/s]</th>
<th>Recommended hose diameter [inches] / [mm]</th>
<th>Recommended hose temperature [°F] / [°C]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small to full size cars</td>
<td>250-300 / 120-140</td>
<td>4 / 100</td>
<td>200-300 / 120-150</td>
</tr>
<tr>
<td>Performance sports cars</td>
<td>450-500 / 210-235</td>
<td>4-5 / 100-125</td>
<td>500-600 / 260-325</td>
</tr>
<tr>
<td>Large pick-up trucks/SUV’s</td>
<td>350-400 / 165-190</td>
<td>4-5 / 100-125</td>
<td>500-600 / 260-325</td>
</tr>
<tr>
<td>Diesel trucks/ tractor trailers</td>
<td>700-800 / 300-375</td>
<td>6 / 150</td>
<td>500-600 / 260-325</td>
</tr>
<tr>
<td>Heavy duty machinery and turbo diesel</td>
<td>1000-1200 / 470-570</td>
<td>8 / 200</td>
<td>900-1200 / 480-650</td>
</tr>
</tbody>
</table>

**Note:** static pressure drop indicated is with 75% of hose used. Pressure loss chart does not include exhaust ducting. Static pressure and airflow for hose reel with 3” hose submitted on request.

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

**Optional spring damper at hose reel outlet**

6” (150 mm) outlet: HR-100-06-30
8” (200 mm) outlet: HR-100-08-30

**Note on opened end type nozzles:** continuous exhaust through opened end type nozzle will use airflow uselessly when reel is not in use. For maximum exhaust performance, select optional spring damper at hose reel outlet as shown above (motorized dampers available).

**CHART 4**

<table>
<thead>
<tr>
<th>Fan data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available voltages</td>
</tr>
<tr>
<td>115/230-1-60</td>
</tr>
<tr>
<td>208/460-3-60</td>
</tr>
<tr>
<td>575-3-60</td>
</tr>
<tr>
<td>Impeller type</td>
</tr>
<tr>
<td>Backward inclined (aluminum)</td>
</tr>
<tr>
<td>Housing</td>
</tr>
<tr>
<td>Steel (painted)</td>
</tr>
<tr>
<td>Motor</td>
</tr>
<tr>
<td>TEFC</td>
</tr>
<tr>
<td>R.P.M.</td>
</tr>
<tr>
<td>3450</td>
</tr>
</tbody>
</table>

**CHART 5**

|-------|---------------|-----------------------------|---------------------|

**CHART 6**

**Note:** static pressure drop indicated is with 75% of hose used. Pressure loss chart does not include exhaust ducting. Static pressure and airflow for hose reel with 3” hose submitted on request.

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

**Optional spring damper at hose reel outlet**

6” (150 mm) outlet: HR-100-06-30
8” (200 mm) outlet: HR-100-08-30

**Note on opened end type nozzles:** continuous exhaust through opened end type nozzle will use airflow uselessly when reel is not in use. For maximum exhaust performance, select optional spring damper at hose reel outlet as shown above (motorized dampers available).
### Flexible Hoses

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum temperature</th>
<th>Fabric [inches] / [mm]</th>
<th>Usage / Application</th>
<th>Diameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH-240H-X</td>
<td>240-300 °F / 115-135 °C</td>
<td>Cotton neoprene with exterior helix</td>
<td>Cars-light trucks</td>
<td>3 to 8” (75 to 200 mm)</td>
</tr>
<tr>
<td>FH-500-X</td>
<td>-500-600 °F / 260-315 °C</td>
<td>Two (2) ply silicone fiber</td>
<td>High revolution engines, diesel trucks</td>
<td>3 to 8” (75 to 200 mm)</td>
</tr>
<tr>
<td>FH-500W-X</td>
<td>-500-600 °F / 260-315 °C</td>
<td>Two (2) ply silicone fiber with protective wearstrip</td>
<td>High revolution engines, diesel trucks</td>
<td>3 to 8” (75 to 200 mm)</td>
</tr>
<tr>
<td>FH-900H-X</td>
<td>900-1000 °F / 480-535 °C</td>
<td>E-glass polyurethane with exterior helix</td>
<td>Quarry and heavy duty machinery</td>
<td>3 to 8” (75 to 200 mm)</td>
</tr>
<tr>
<td>FH-1200H-X</td>
<td>1200-1350 °F / 650-730 °C</td>
<td>2 ply E-glass polyurethane with exterior helix</td>
<td>Extreme temperature</td>
<td>3 to 8” (75 to 200 mm)</td>
</tr>
</tbody>
</table>

**CFIT**: 25° x 225 mm: stainless steel HW-WM551 -2 or galvanized steel HW-WM112

Note on flexible hoses: fumes vacuumed into flexible hoses are cooled with drawn ambient air. Combination of extreme, high, and low temperature hoses are available in order to minimize operating costs. Call factory or representative for details.

**Chart 7**

**FH-240H-X**

**FH-500-X**

**FH-1200H-X**

**FH-900H-X**

*Available with protective wearstrip

**CHART 7**

**Flexible Hoses**

- **FH-240H-X**: 240-300 °F / 115-135 °C, Cotton neoprene with exterior helix
- **FH-500-X**: -500-600 °F / 260-315 °C, Two (2) ply silicone fiber
- **FH-500W-X**: -500-600 °F / 260-315 °C, Two (2) ply silicone fiber with protective wearstrip
- **FH-900H-X**: 900-1000 °F / 480-535 °C, E-glass polyurethane with exterior helix
- **FH-1200H-X**: 1200-1350 °F / 650-730 °C, 2 ply E-glass polyurethane with exterior helix

**Crush resistant hose available for specific applications only. Contact factory for details.**

**Optional rag stop 1/2” x 1/2” wire mesh: stainless steel HW-WM551 or galvanized steel HW-WM112**

**Note on flexible hoses:** fumes vacuumed into flexible hoses are cooled with drawn ambient air. Combination of extreme, high, and low temperature hoses are available in order to minimize operating costs. Call factory or representative for details.
Create your MAXREEL exhaust hose reel specification

1. **Hose reel should include:**
   - Powder coat painted steel structural parallel tubings for stability, 10 and 12 gauge powder coat painted steel side panels and braces, hose guide bar for proper coiling and wrapping of hose around the drum, galvanized steel hose storage drum, duct exhaust flange.

2. **Hose reel should include hose diameter of:**
   - a) 3” [75 mm]
   - b) 4” [100 mm]
   - c) 5” [125 mm]
   - d) 6” [150 mm]
   - e) 8” [200 mm]

3. **Hose reel should have storage capacity of:**
   - a) 25’ [8 M]
   - b) 35’ [10.8 M]
   - (contact factory for other available lengths)

4. **Hose reel should include hose model:**
   - a) FH-240H-X
   - b) FH-500-X
   - c) FH-500W-X
   - d) FH-900H-X
   - e) FH-1200H-X

5. **Hose reel should include drum rotation by means of:**
   - a) dual tempered steel springs with ratchet lock
   - b) direct drive tube motor [115-1-60] with radio remote transmitter
   - c) direct drive tube motor [115-1-60] with pendant switch
   - d) direct drive tube motor [115-1-60] with pendant switch and fan switch
   - e) direct drive tube motor [115-1-60] with wall mounted switch
   - f) direct drive tube motor [115-1-60] with wall mounted switch and fan switch

6. **Hose reel should include direct drive mounted fan model:**
   - a) DF-101 (voltage to be confirmed)
   - b) DF-102 for 8” [200 mm] reels only (voltage to be confirmed)
   - c) control panel for reel with single fan start/stop operation (no proximity switch)
   - d) proximity switch for automatic start/stop of fan
   - e) control panel for single reel with single fan and proximity switch

7. **Hose reel should include tailpipe adaptors model:**
   - a) selection to be made from list of available adaptors in this leaflet (page 7).
   - b) galvanized steel wire mesh in adaptor
   - c) stainless steel wire mesh in adaptor
   - d) telescopic aluminum grab pole

8. **Hose reel side outlet should include:**
   - a) reel motion activated outlet damper
   - b) motorized outlet damper

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