

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 2000°F / 1100°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



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
- Heavy duty tempered steel spring pack
- Powder coat painted and galvanized steel components
- 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

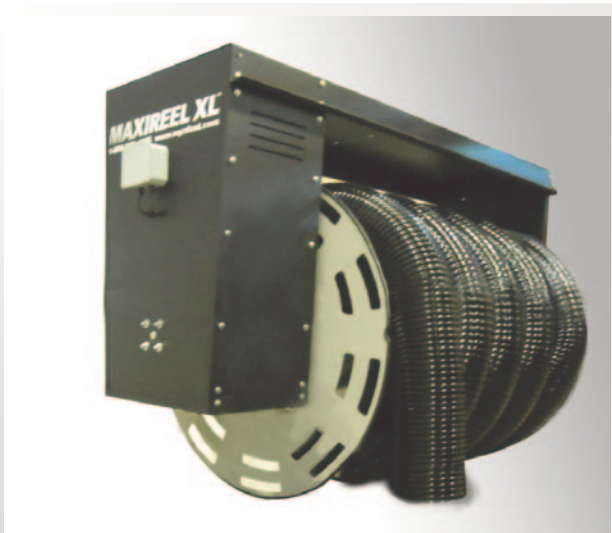
MAXREEL EXHAUST EXHAUST HOSE REEL TYPICAL INSTALLATION AND APPLICATION



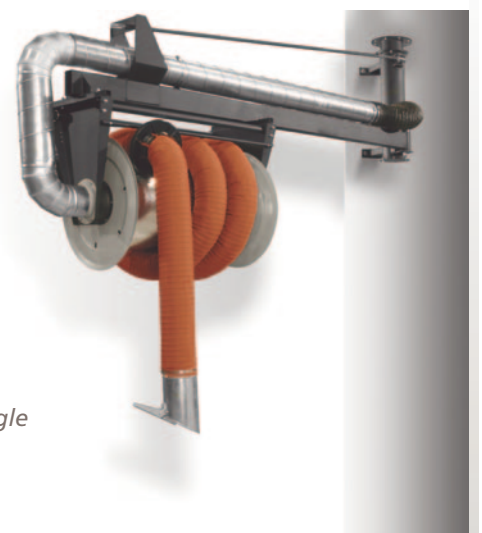
High temperature hose with truck stack aluminum cane nozzle.



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.



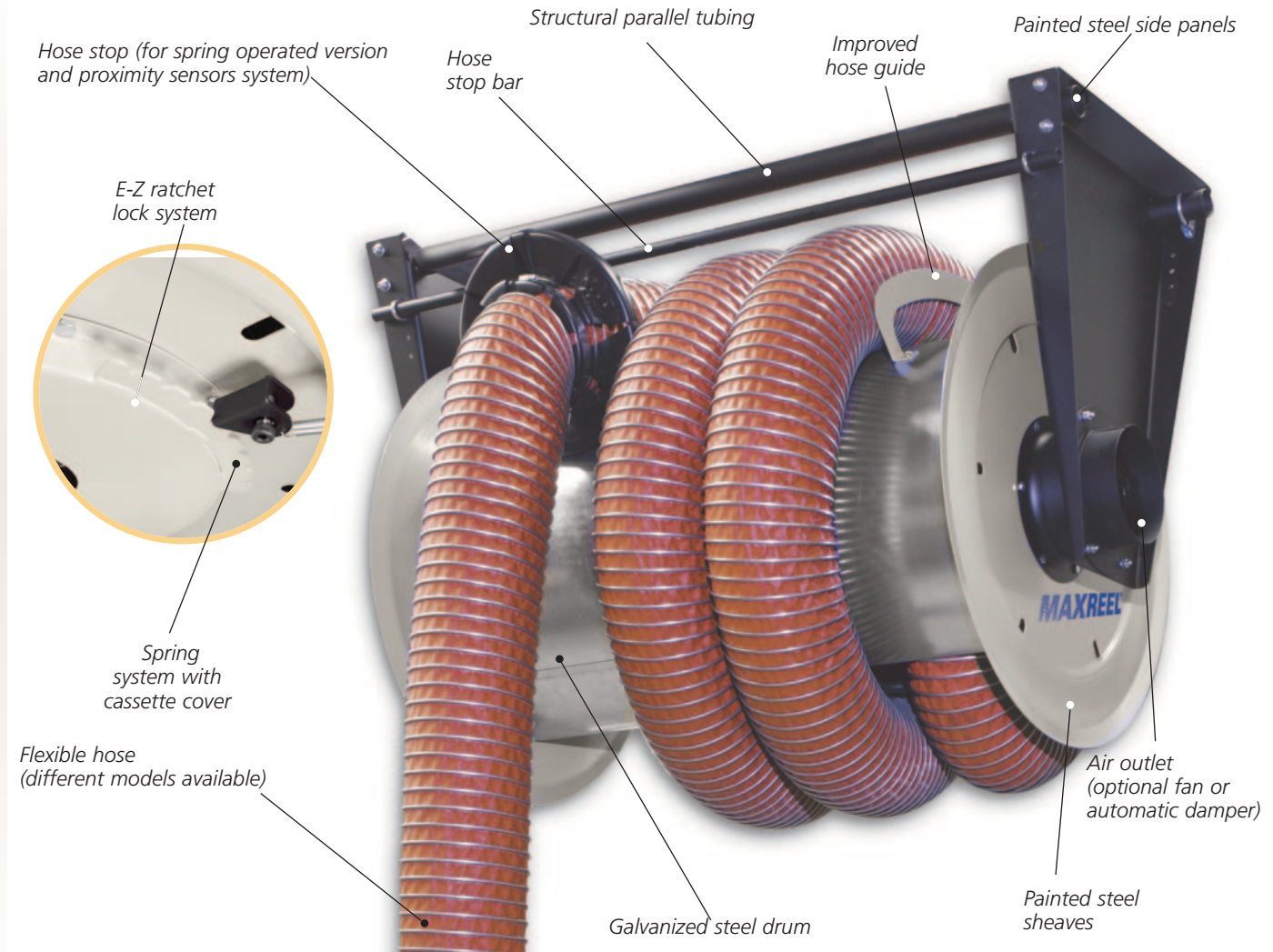
MAXREEL equipped with MAXBOOM single pivot boom.

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

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)
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)
HRM-100-00-70

Wall mounted 3 way rotary switch with fan control (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.

DIMENSIONS (MOTORIZED AND SPRING RECOIL MODELS)

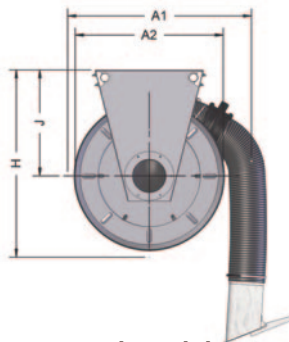


CHART 1

Drum width [inches] / [mm]	Dimensions [inches] / [mm]										Weight without hose	
	A1	A2	H	L1	S1	L2	S2	J	D1	D2	[lbs] / [kg]	
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.

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

Third digit = hose diameter

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

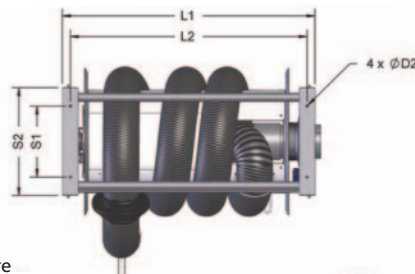
Last set of two (2) digits = length of flexible hose

EX # 1: HRMW-139650025

means hose reel, motorized, wireless radio signal, 39" wide drum, 6" diameter hose, 500°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.

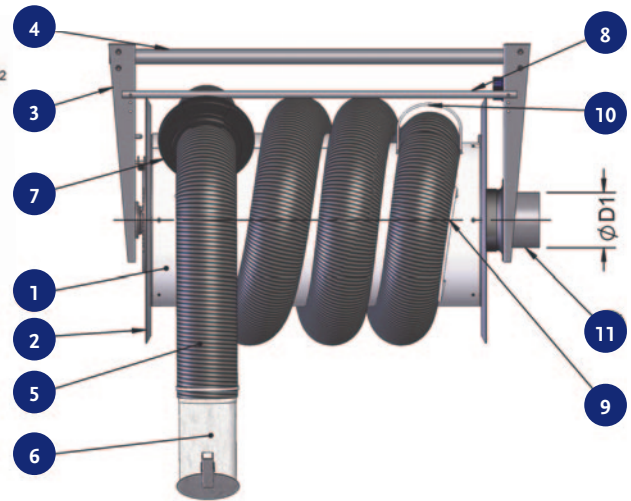
EX # 2: HR-124424025

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



Drum width **CHART 2**

Hose diameter (in/mm)	Hose storage capacity (ft./m.)	Drum width (in/mm)
3/75	25/7.7	24/600
	35/10.7	24/600
4/100	25/7.7	24/600
	35/10.7	34/850
5/125	25/7.7	24/600
	35/10.7	34/850
6/150	25/7.7	34/850
	35/10.7	39/975
8/200	25/7.7	34/850
	35/10.7	45/1125



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 DIMENSIONS WITH DIRECT MOUNTED FAN

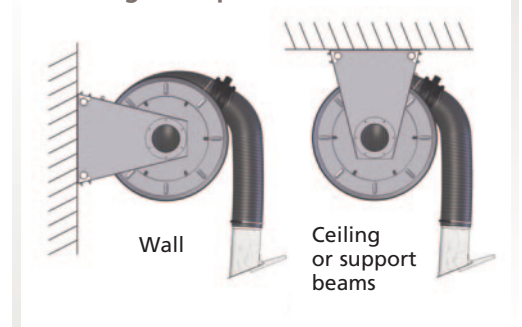


CHART 3

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

Mounting examples

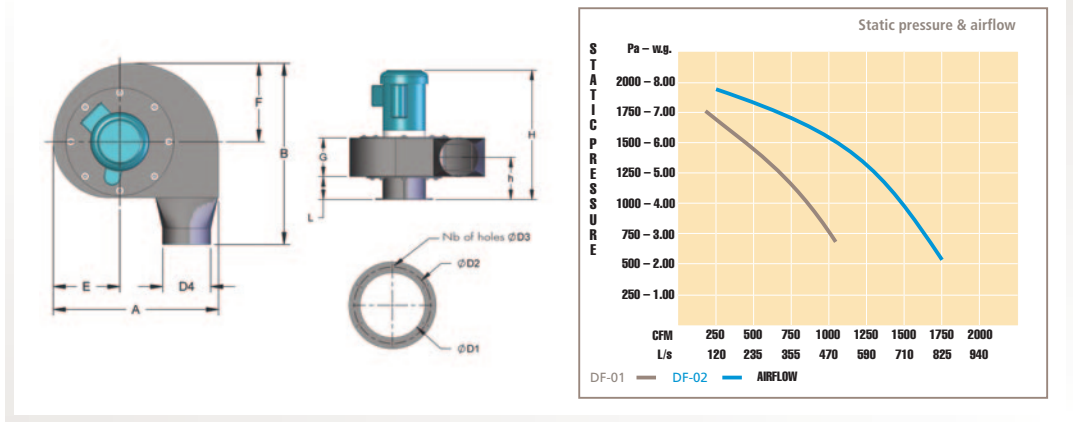


Note: MAXREEL exhaust hose reel may be equipped with other than 25' or 35' hose length configurations. Contact factory for details.

MAXDRIVE FANS (3450 R.P.M.)

Backward inclined

CHART 4



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 5

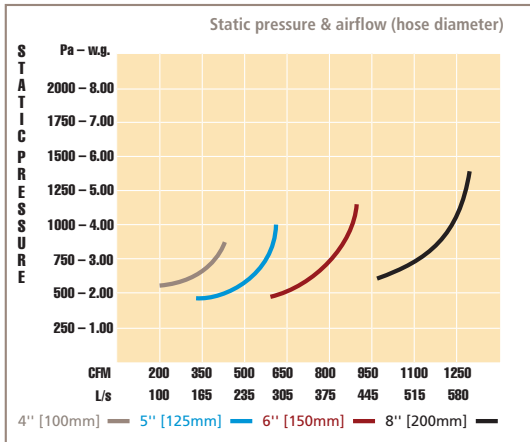
Model	Power [HP/Kw]	Dimensions [inches] / [mm]													Weight [lbs] / [kg]
		A	B	E	F	H	L	G	h	d1	d2	d3	d4	n	
DF-101	1 / 0.75	20.2 / 513	22.6 / 574	8.3 / 211	9.8 / 249	21.1 / 536	3.9 / 99	5.9 / 150	6.9 / 175	6.25 / 160	7.69 / 195	0.4 / 9	6 / 198	6	70 / 31.8
DF-102	2 / 1.50	22.7 / 577	24.8 / 630	9.2 / 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.

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.

CHART 6



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

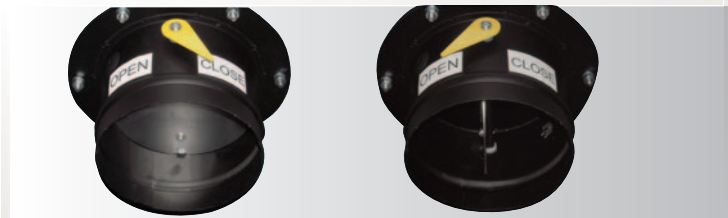
Note: static pressure drop indicated is with 75% of hose used. Pressure loss chart does not include exhaust ducting. Static pressure and air flow for hose reel with 3" hose submitted on request.

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 air flow 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).

TAILPIPE ADAPTORS & NOZZLES ALL RUBBER NOZZLES ARE CRUSH RESISTANT

Rubber adaptors
protect chrome tailpipes

NR-TPA3000



Y adaptors designed for split tailpipes up to 3" (75 mm) in diameter. Y hoses 24" long each. (crush-resistant)
Note: to be used temporarily. Not to be permanently attached to hose reel.

NR-YA300-400



Y adaptors designed for split tailpipes 3" (75 mm) or 4" (100 mm) in diameter. Y hoses 48" long each. (crush-resistant)
Note: to be used temporarily. Not to be permanently attached to hose reel.

NR-F300-350-400



Straight adaptors with hook and chain. Up to 2,5" (65 mm), 3" (75 mm) or 3,5" (90 mm) in diameter. (crush-resistant)

NR-F475-575



3" x 6" (75 x 150 mm) or 3" x 8" (75 x 200 mm) oval shaped for dual tailpipes. Attached to tailpipe by means of hook and chain. (crush-resistant)

NR-TWINFLAP



4" x 9" (100 mm x 225 mm) for side by side tailpipes rubber nozzle equipped with slotted closing flaps minimizing air loss. (crush-resistant)

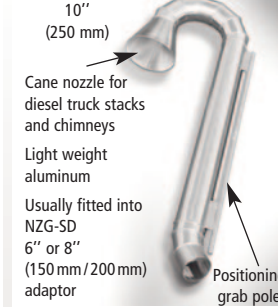
NR-RA250-300



Fits most car and light truck tailpipe sizes up to 3" (75 mm). Attached to tailpipe by means of cuffs and slots. (crush-resistant)

Galvanized steel tailpipe adaptors
(also available in stainless steel, contact factory for details)

NA-DC-06-08



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

Note: cane nozzle is to be used temporarily. Not to be permanently attached to hose reel.

N-POLE-SQ-HO



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.

NG-OE-HO

NG-SD



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

NG-PEA



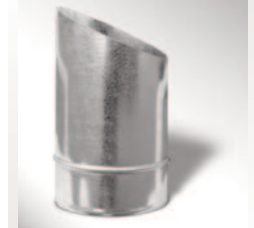
Spring loaded damper type with port emission analyzer. Available from 4" to 8" (100 to 200 mm).

NG-VG



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.

NG-OE



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

Optional rag stop 1/2" x 1/2" wire mesh: stainless steel HW-WMSS1/2 or galvanized steel HW-WM1/2

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.

FLEXIBLE HOSES

CHART 7

Model	Maximum temperature	Fabric [inches] / [mm]	Usage / Application	Diameters
FH-240H-X	240-300 °F / 115-135 °C	Cotton neoprene with exterior helix	Cars-light trucks	3 to 8" (75 to 200 mm)
FH-500-X	-500-600 °F / 260-315 °C	Two (2) ply silicone fiber	High revolution engines, diesel trucks	3 to 8" (75 to 200 mm)
FH-500W-X	-500-600 °F / 260-315 °C	Two (2) ply silicone fiber with protective wearstrip	High revolution engines, diesel trucks	3 to 8" (75 to 200 mm)
FH-900H-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)
FH-1200H-X	1200-1350° F / 650-730° C	2 ply E-glass polyurethane with exterior helix	Extreme temperature	3 to 8" (75 to 200 mm)

FH-240H-X



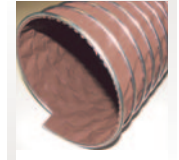
FH-900H-X



FH-500-X



FH-1200H-X



* Available with protective wearstrip

DAS will not be held liable if flexible hose selected is used for higher exhaust temperatures than the tolerance indicated in chart 7.
Note : X digit at end of model number indicates hose diameter. Ex. : FH-500-6 equals to a 6" diameter hose. Specify length required.
Crush resistant hose available for specific applications only. Contact factory 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.

Diversified Air Systems, Inc.

10801 Electron Drive, Louisville, Kentucky 40299

Toll free: **(800) 264-8958**

Tel.: **(502) 267-0333** • Fax: **(502) 267-4241**

Website: www.diversair.com • email: info@diversair.com