



Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 2/4/2025

Return Request: 2/14/2025

Project: City Of Sherwood Public Works (Maintenance Building)

Supplier: Airetech

Manufacturer: Nederman

Submittal: Engine Exhaust Fans (Hose Reels)

Submittal Number: 23 35 16-01

Drawing # and Installation: Mechanical Drawings

ARCHITECT

Cromwell
1300 East 6th Street
Little Rock, AR 72202
501-372-2900

ENGINEER

Cromwell
1300 East 6th Street
Little Rock, AR 72202
501-372-2900

GENERAL CONTRACTOR

Baldwin & Shell
1000 W. Capitol Ave.
Little Rock, AR 72201
501-374-8677

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

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CSUSA PROJECT NO.

24-6084

sean@comfortar.com

9924 Landers Rd.
No. Little Rock, AR 72117



SUBMITTAL DATA

EQUIPMENT: Nederman Vehicle Exhaust Hose Reels

TAGS: Note 9 (Hose Reel) - Sheet M-101-B
Maintenance and Operations Building

PROJECT: City of Sherwood Public Works Facilities

LOCATION: Sherwood, Arkansas

ENGINEER:



CONTRACTOR:



DATE: 12/10/2024

SUBMITTED BY: Forrest Moseley
forrest@airetechcorp.com

ENGINEER CONTACT: Nick Moore

Nederman

QUOTATION

Sold To: Airetech VRS Sherwood
Contact: Nick
Address:

City:
Province:
Postal Code:
Email:
Phone:
Fax:

Here is the quote you requested.

Part #	Qty	Description
20809065	4	865 Hose Reel 8" with damper 865S EXHAUST HOSE REEL with spring recoil. - WITHOUT hose. - Can accomodate 8"Ø (200mm) x 33' (10m). (NOTE:Maximum retracable length on reel is 23') - 8"Ø (200mm) hose stop - Wide body w/reinforced spring.
86900696	4	Hose Ex 200mm/10m NFC-4.2 HT800 Nederman exhaust hose NFC4 for high temperature, silicon coated fabric with galvanized steel helix. For maximum of 426°C (800°F) continuous, 468°C (875°F) intermittent. ø 200 mm (8") diameter by 10 m (33') long.
89298076	4	SS Nozzle 8" w/clp & lifting sleeve Nederman Stainless steel exhaust nozzle for vertical exhaust stack. Includes hook for telescopic pole handling and vise-grip. Hose connection 200 mm (8"). Inlet opening 250 mm (10") diameter
20804265	4	Exhaust hose reel spring 6" with damper EXHAUST HOSE REEL Spring recoil 865 with damper. For ø 150mm hose, without hose, wide body. With reinforced spring.

Part #	Qty	Description
86900693	4	NFC 4.2 Hose, 6" x 33 ft Exhaust Hose NFC4 for high temperature, silicon coated fabric with galvanized steel helix. - For max 800°F (426°C) continuous, 875°F (468°C) intermittent. - 6"Ø (152mm) x 33' (10m) - Two (2) clamps included
89298067	4	SS Nozzle 6" w/clp & lifting sleeve Nederman Stainless steel exhaust nozzle for vertical exhaust stack. Includes hook for telescopic pole handling and vise-grip. Hose connection 150 mm. For use with exhaust pipe 200 mm diameter maximum

Submittal Note:

1. 8" hose reels to be used with VEF-1,2 in the greenheck fan submittal.
2. 6" hose reels to be used with VEF-3,4 in the greenheck fan submittal.

Nederman

Instruction manual

Exhaust Hose Reel

Exhaust Hose Reel Serial 865



Original instruction manual

INSTRUCTION MANUAL

EN

Translation of original instruction manual

ANVÄNDARMANUAL

SE

HANDLEIDING

NL

BETJENINGSVEJLEDNING

DK

KÄYTTÖOHJEET

FI

BRUKSANVISNING

NO

INSTRUKCJA UŻYTKOWANIA

PL

BEDIENUNGSANLEITUNG

DE

NÁVOD K OBSLUZE

CZ

MANUEL D'INSTRUCTION

FR

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MANUAL DE INSTRUCCIONES

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说明书

ZH

MANUALE D'ISTRUZIONE

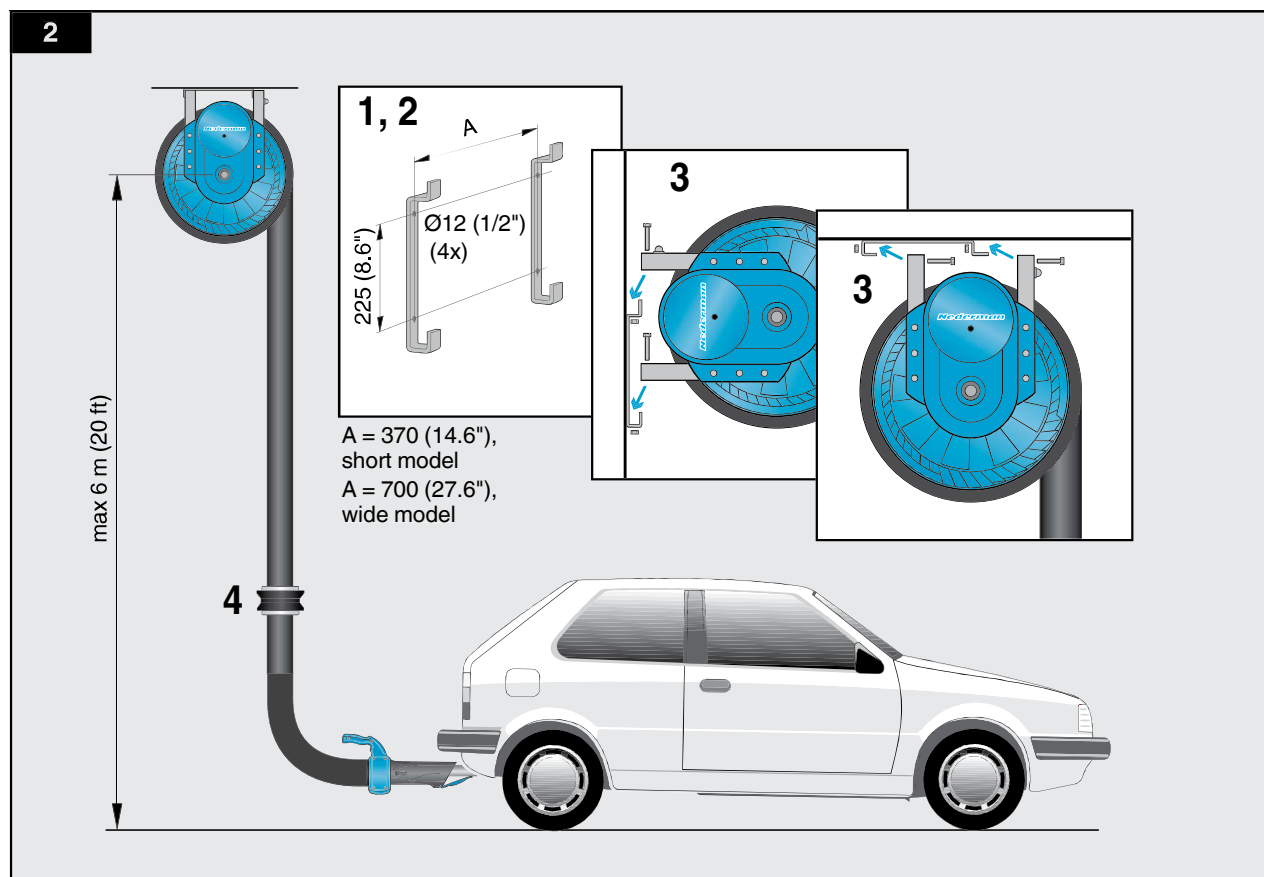
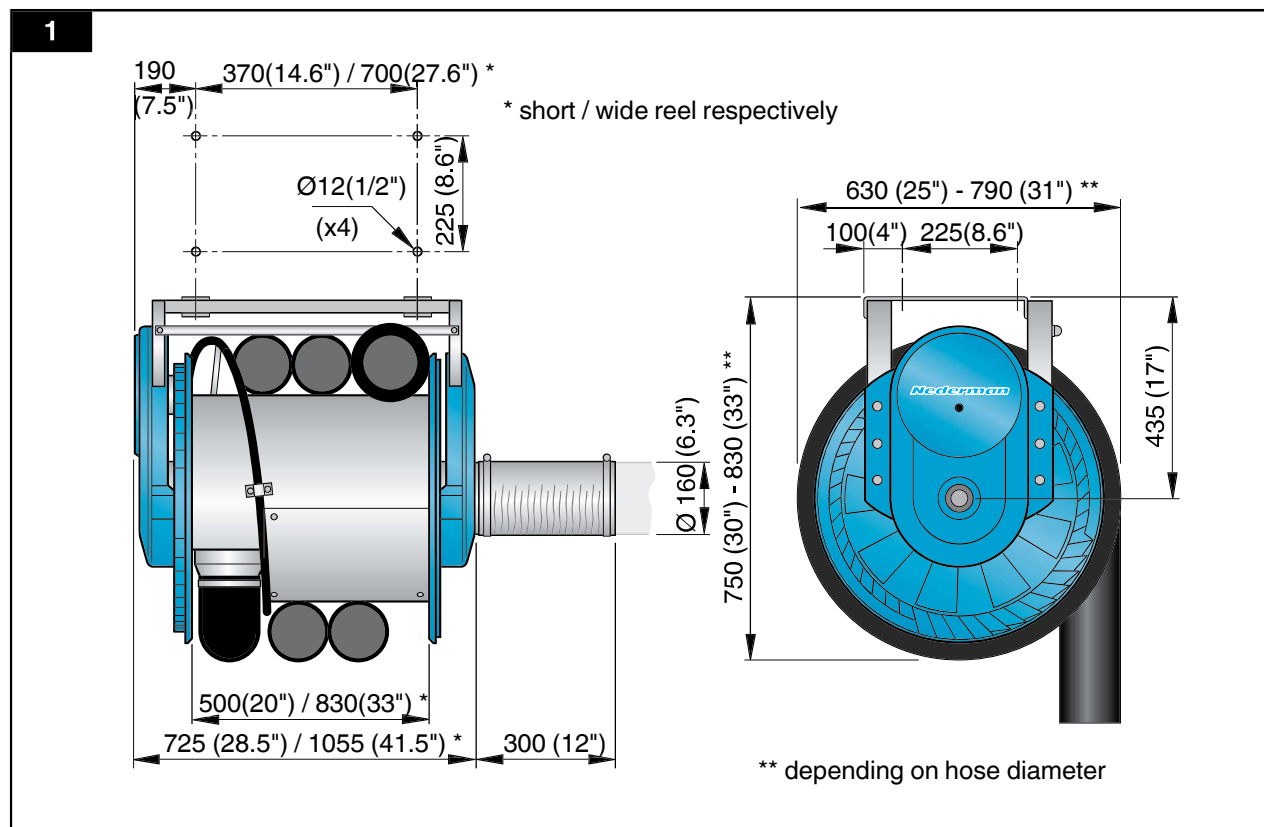
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РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

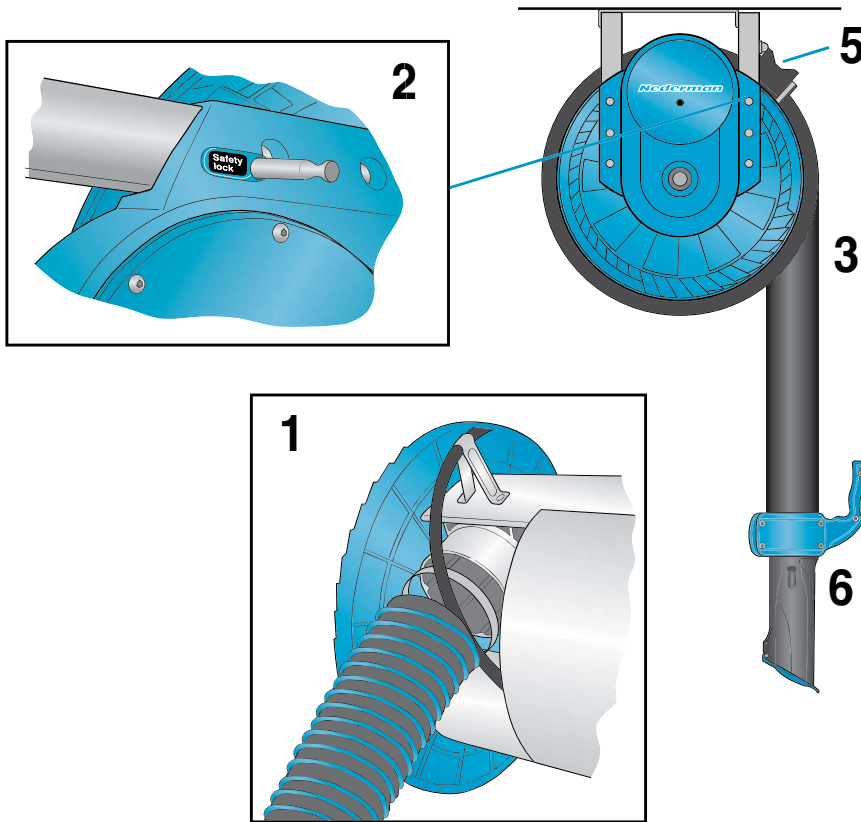
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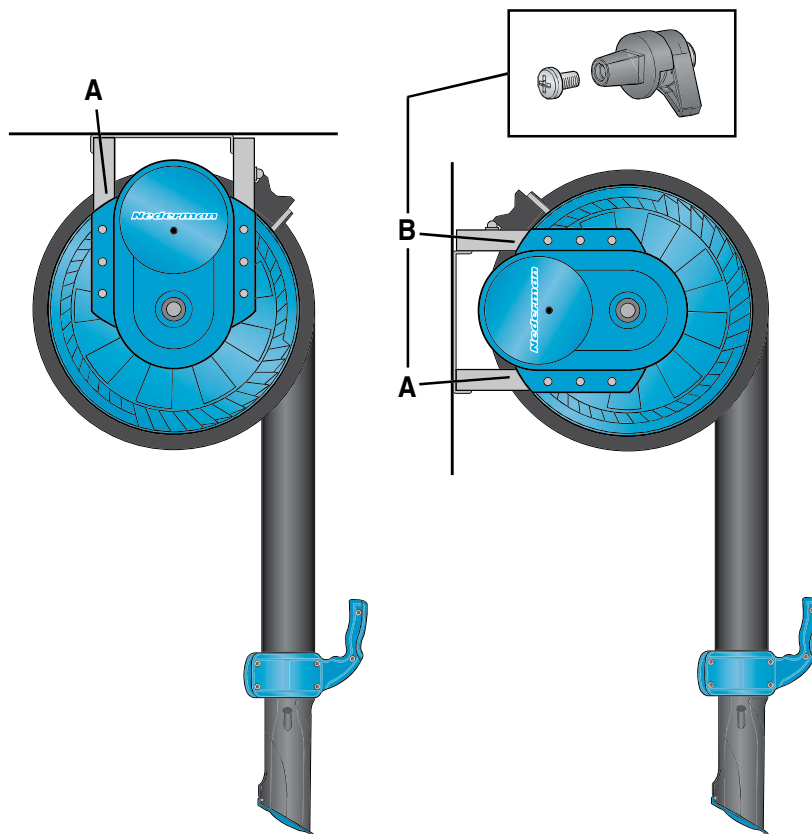
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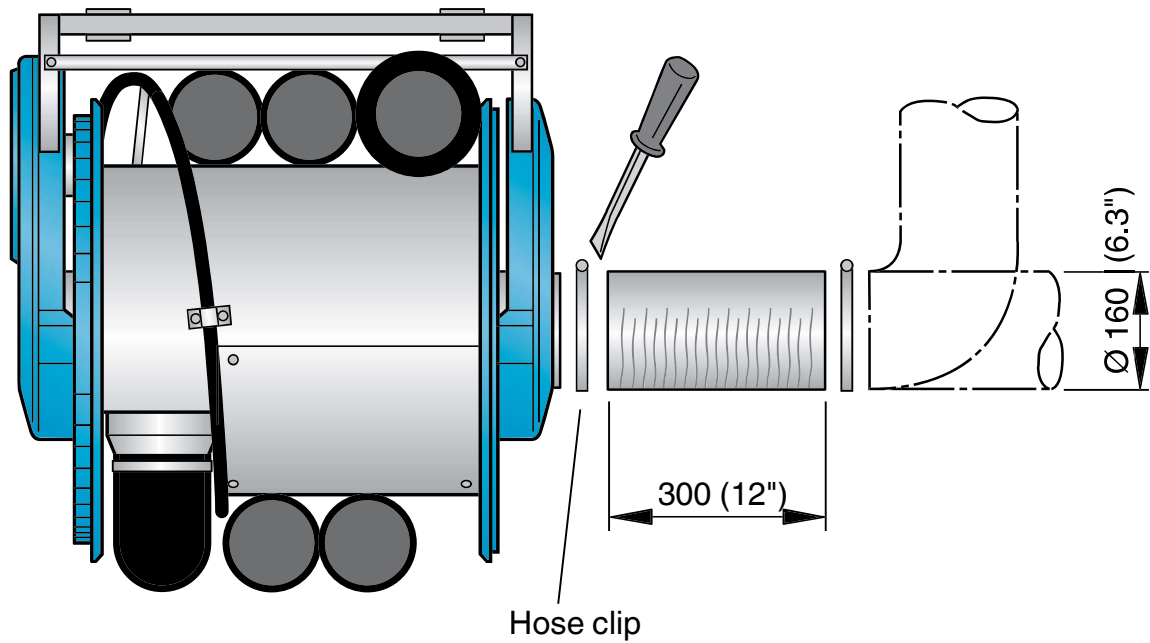
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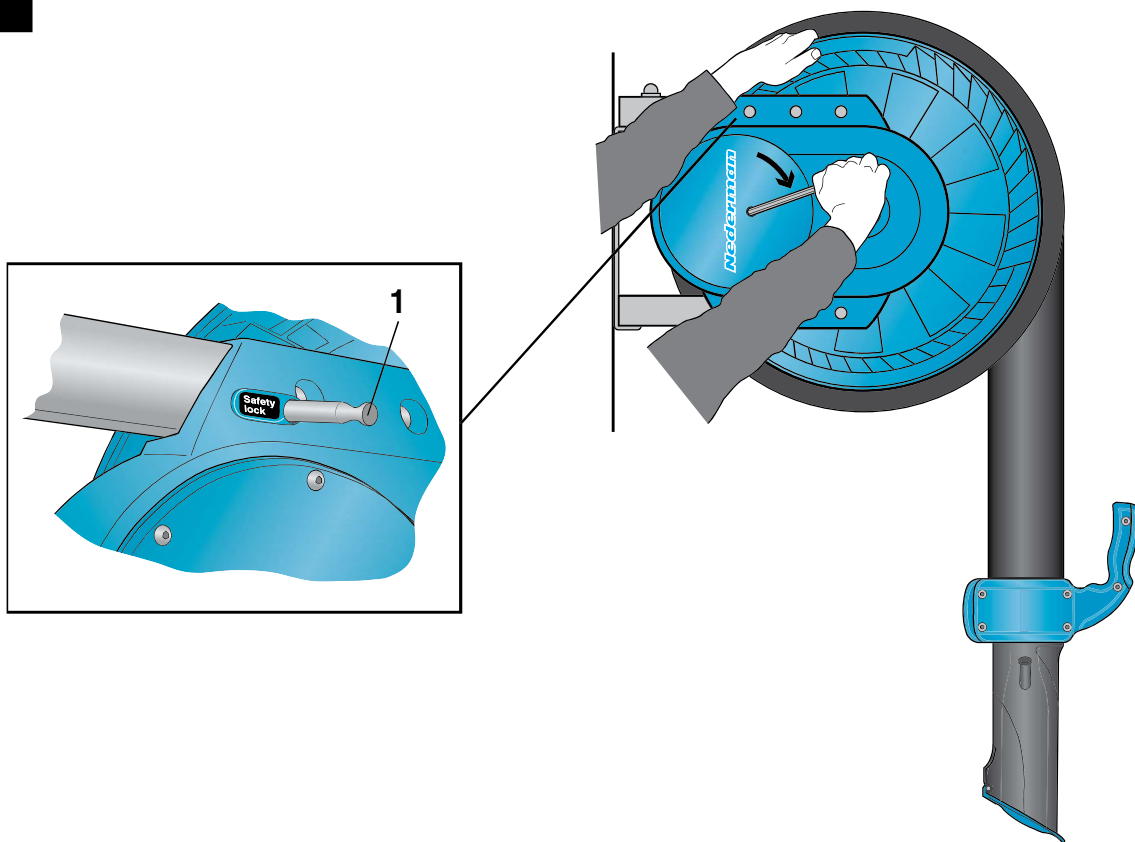
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5



6



7

Röd - stängt (lukket)
Red - closed
Rot - geschlossen
Rouge - fermé



Roja - cerrado
Rosso - chiusa
Rood - dicht
Punainen - kiinni

Damper function



Grön - öppet (åbent)
Green - open
Grün - geöffnet
Verte - ouvert

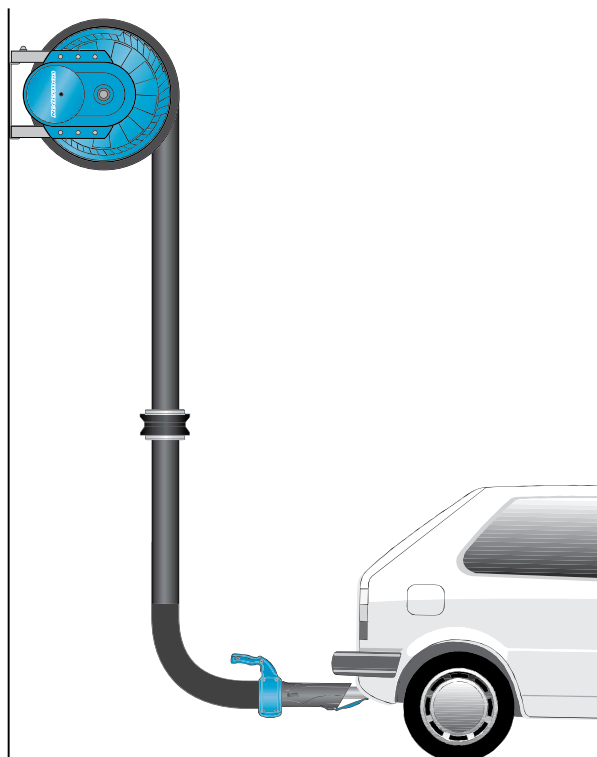


Verde - abierto
Verde - aperta
Groen - open
Vihreä - auki



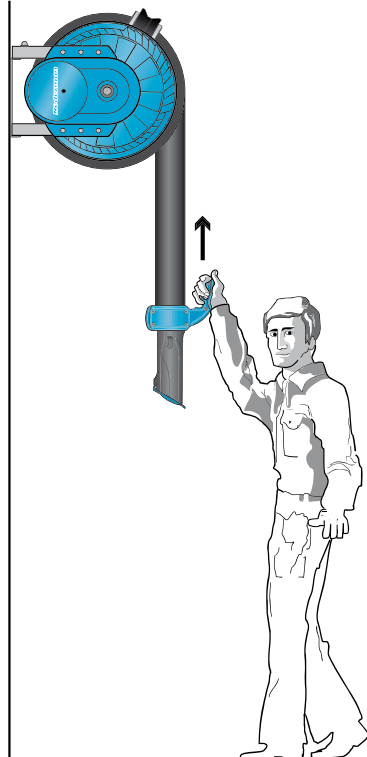
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Connection

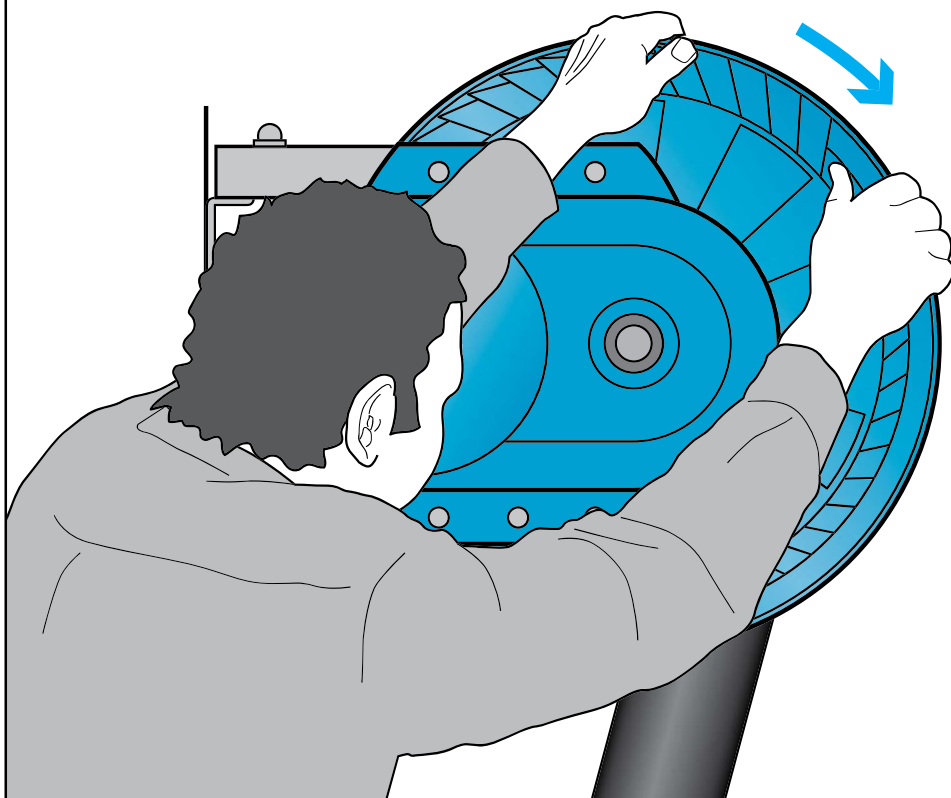


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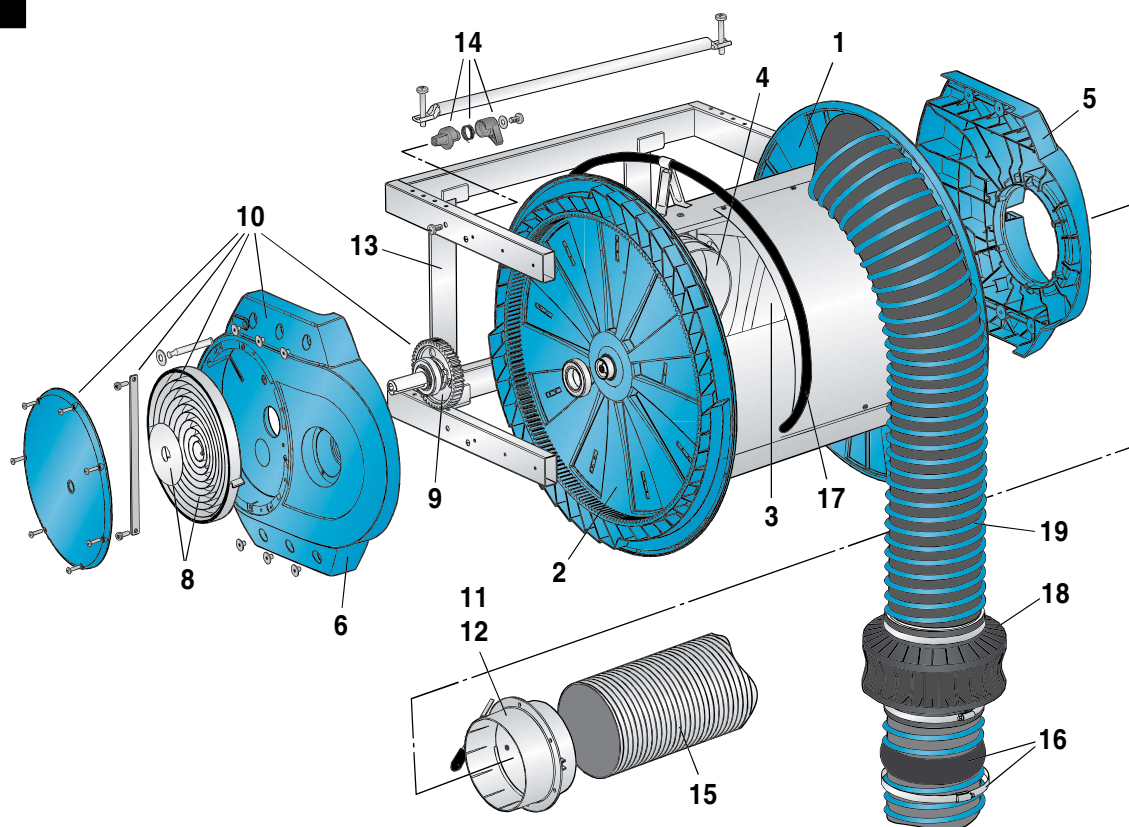
Disconnection



10



11



English

Instruction manual

Exhaust Hose Reel**Exhaust Hose Reel Serial 865****Table of contents**

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1 Declaration of conformity

We, AB Ph. Nederman & Co., declare under our sole responsibility that the Nederman product:

Exhaust Hose Reel Serial 865 to which this declaration relates, is in conformity with all the relevant provisions of the following directives and standards:

Directives

2006/42/EC

Standards

EN ISO 12100-1-2

The name and signature at the end of this document, is the person responsible for both the declaration of conformity and the technical file.

AB Ph. Nederman & Co.
P.O. Box 602
SE-251 06 Helsingborg
Sweden



A handwritten signature in blue ink, appearing to read 'Lars Nagy', with a stylized flourish at the end.

Lars Nagy
Technical manager

2 Preface

To guarantee a correct function and a minimal service, it is important to read and understand the information in this instruction manual.

The product is designed to meet the requirements of the relevant EC directives. To maintain this status all installation, repair and maintenance work must be carried out by qualified personnel using only original spare parts. Contact your nearest authorised dealer or AB Ph. Nederman & Co. for advice on technical service or if you require spare parts.

3 Description

3.1 Technical data

Table 3-1: Technical data

Exhaust Hose Reel	
Weights, short reel, without hose	23 kg (51 lbs)
Weights, short reel, with hose and nozzle	30–40 kg (66–82 lbs)
Weights, wide reel, without hose	31 kg (68 lbs)
Weights, wide reel, with hose and nozzle	40–50 kg (82–110 lbs)
Recommended mounting height	Maximum 6 m (20 ft)
Duct connection	Ø 160 mm (6.3 in)
Recommended airflows, cars, 75–100 mm (3"–4") hose	400–600 m³/h (235–350 cfm)
Recommended airflows, trucks, 125–150 mm (5"–6") hose	800–1200 m³/h (470–700 cfm)
Operating temperature	–10 °C to +50 °C (15 °F to 120 °F)
Hose temperature resistance, Hose NR-CP or NTP	150 °C (300 °F) continuously
Hose temperature resistance, Hose NFC-3	300 °C (570 °F) continuously
Noise level, Measured according to ISO 11201.	< 70 dB(A)
Material recycling, Reels without hose	100 weight-%

4 Installation

4.1 Installing Serial 865

See Figure 2. Maximum mounting height for the reel is 6 m.

1. Make sure that the surface, on which to mount the reel, is level. Drill 4 holes, using the hole template which comes in the package.
2. Fit the mounting brackets in such a way that will make the reel hanging horizontally. Ensure that suitable fixing bolts are used considering the ceiling or wall construction material. The bolts must each stand a tractive force of minimum 6500 N.
3. Use approved lifting equipment to lift the reel. Fasten the reel in the brackets.

4. Fit the hose stop on the hose in such position that the nozzle stops in a desired position when the hose is recoiled.

4.2 Safety lock

See Figures 3–4.



WARNING! Risk of personal injury.

The reel is equipped with a safety lock which should be used during service or repair work on the reel, for example when mounting or changing the hose. NB! When changing the spring the spring power must be completely neutralized (instruction is delivered together with the spare part spring).

4.3 Mounting the hose

See Figure 3. When the reel has been mounted on wall or ceiling, the hose is mounted in the following way (concerning reels delivered without hose only):

1. Fasten the hose with a hose clip on the connecting piece inside the drum.
2. Pull out the safety lock.
3. Wind all the hose on, by turning the drum in the direction of the arrow. Ensure that the hose only forms one layer on the drum.
4. Tension the spring. See “Adjustment of spring tension” page 14.
5. Fit the hose stop on the hose in such position that the nozzle stops in a desired position when the hose is recoiled.
6. Fit the nozzle.

4.4 Ratchet device

See Figure 4. The reel is fitted with a ratchet device which lock's the hose in the desired position. The ratchet is released when the hose is pulled out slightly further and the hose is then automatically recoiled. The ratchet is factory set for ceiling mounting of the reel (position A). When mounting the reel on wall, the ratchet must be moved from position A to B.

N.B. The ratchet must, after it has been mounted, point towards the centre of the reel.

4.5 Connection duct

See Figure 5. The connection hose supplied with the reel, should be used for connecting the reel to duct systems and a central fan.

NB! The duct must be fitted with hose clips. Do not drill or fit with screws.

4.6 Fan positioning

A suitable fan can be selected from the Nederman fan range. To avoid leakage in the ducting system the fan should be positioned outdoors or as near the duct outlet in the room as possible.

4.7 Adjustment of spring tension

See Figure 6. The reel has factory set basic spring tension which after mounting the reel with hose and nozzle could need an adjustment.

N.B. Do not tension the spring more than is needed to exactly roll the hose to its position of rest.

4.7.1 Increasing the spring tension (mounted reel)

1. Make sure that the hose is in place and fully recoiled on the reel.
2. Pull the hose out a little and make sure that it is in engaged position. Push the safety catch (A).
3. Use the socket head cap spanner which comes with the reel. Turn in the direction of the arrow as shown in the picture.
4. Tension the spring in small steps and test the coiling operation gradually.
5. Draw out the safety catch (A). Check that the hose can be fully uncoiled without stretching the spring to its maximum.

4.7.2 Decreasing the spring tension (mounted reel)

1. Make sure that the hose is in place and fully recoiled on the reel.
2. Push the safety catch (A).
3. Remove the hose stop and nozzle.
4. Remove 1 coil of hose.
5. Refit the hose stop and nozzle.
6. Draw out the safety catch (A).

4.8 Damper function

See Figure 7. The reel is fitted with a mechanical damper which automatically opens when the hose is pulled out. The damper closes when the hose is rewound.

The damper is equipped with a red and green mark:

- red mark: the damper is closed
- green mark: the damper is open

4.9 Applications

Nederman Exhaust Reel is designed for stationary use only and can, depending on hose diameter, be connected to cars, trucks or other vehicles with similar motor sizes. The following air flows are recommended.

Reels for cars

75/100 mm (3"/4") hose: 400–600 m³/h (235–350 cfm)

Reels for trucks

125/150 mm (5"/6") hose: 800–1200 m³/h (470–700 cfm)



WARNING! Risk of explosion!

The reel must not be used for other purposes than exhaust extraction.

4.10 Directions for use

4.10.1 Connection

Pull the hose out to desired position and make sure that it is in engaged position. Connect the nozzle to the vehicle exhaust pipe (See Figure 8).



WARNING! Risk of severe personal injury

- Check that there is enough suction in the exhaust hose before it is connected to the vehicle's exhaust pipe. If not, check the fan's rotation direction and/or damper function. If necessary check installation of fan start switch.
- An exhaust gas detector is recommended.

4.10.2 Disconnection

Disconnect the nozzle from the vehicle exhaust pipe. Draw the hose out a little to disengage the ratchet. The hose now recoils to the drum and it should be held by hand until it has moved to its end position. Make sure that the hose only forms one layer on the drum (See Figure 9).

4.11 IMPORTANT!

See Figure 10. If the hose is pulled out too far, the ratchet could unfortunately become permanently locked. It may be released by the following procedure.

1. Take a steady grip in the drum end plate and turn a little in the outdraw direction until the ratchet is disconnected.
2. Holding the end plate and hose at the same time, then slowly release until the hose has been recoiled.
3. Fit the ratchet in the other mounting position.

5 Maintenance

5.1 Service instruction

Check the following points at least once a year. Take actions when necessary.

- Check that the reel is secured in the ceiling or on the wall.
- Check the duct connections for leakage.
- Check the hose for damage.
- Check the coiling function of the hose. Adjust the spring power when necessary. See page 14.
- Check the hose connection in the connection piece inside the drum.
- Check operation of the damper. The damper should open automatically when the hose is pulled out.
- Check that there is enough suction in the exhaust hose. If not, check the fan's rotation direction and/or damper function. Check the hose for holes.

5.2 Spare parts

5.2.1 Ordering spare parts

See www.nederman.com.

When ordering spare parts always state the following:

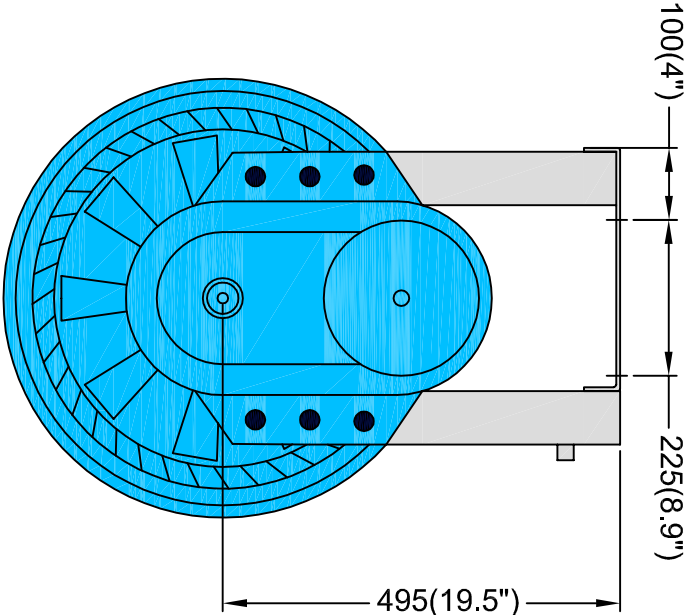
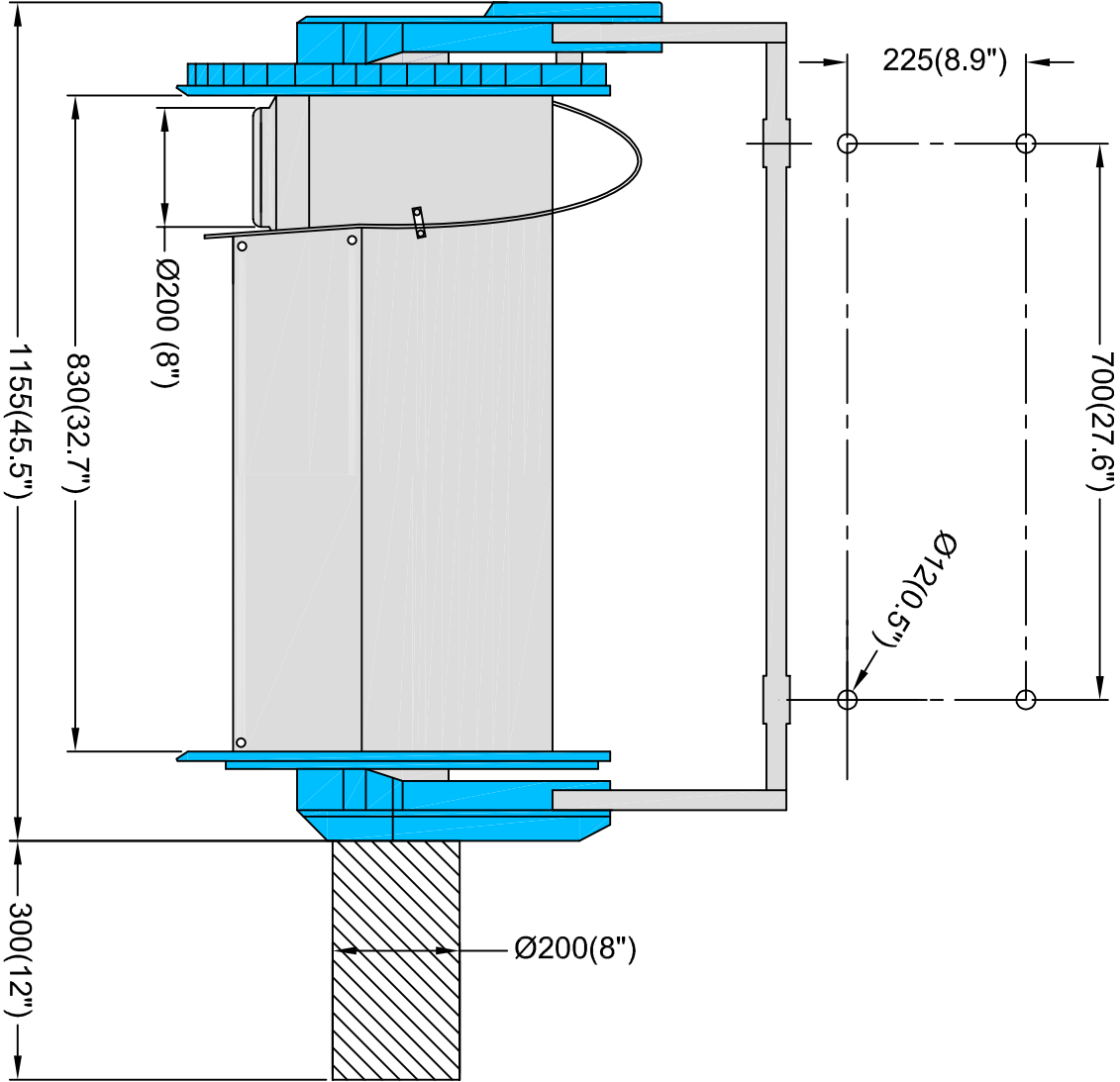
- Part number and control number (see the product identification plate).
- Detail number and name of the spare part (see www.nederman.com and list below).
- Quantity of the parts required.

See Figure 11.

- 1 Drum end plate, swivel side
- 2 Drum end plate, spring side
- 3 Inner tube
- 4 Connecting piece
- 5 Gable, swivel side
- 6 Gable, spring side
- 8 Spring
- 9 Spring hub, complete
- 10 Spring side, complete
- 11 Bearing
- 12 Bearing incl. damper
- 13 Suspension brackets, pair
- 14 Ratchet device
- 15 Connecting hose
- 16 Rubber cover / Hose clip
- 17 Hose guide
- 18 Hose stop
- 19 Hose

Nederman Exhaust Hose Reel - Spring Recoil 865S (Wide Drum) - 20809065

without hose - Suitable for Hose Ø200 mm (8") & Max. Possible Length 10 m(33')



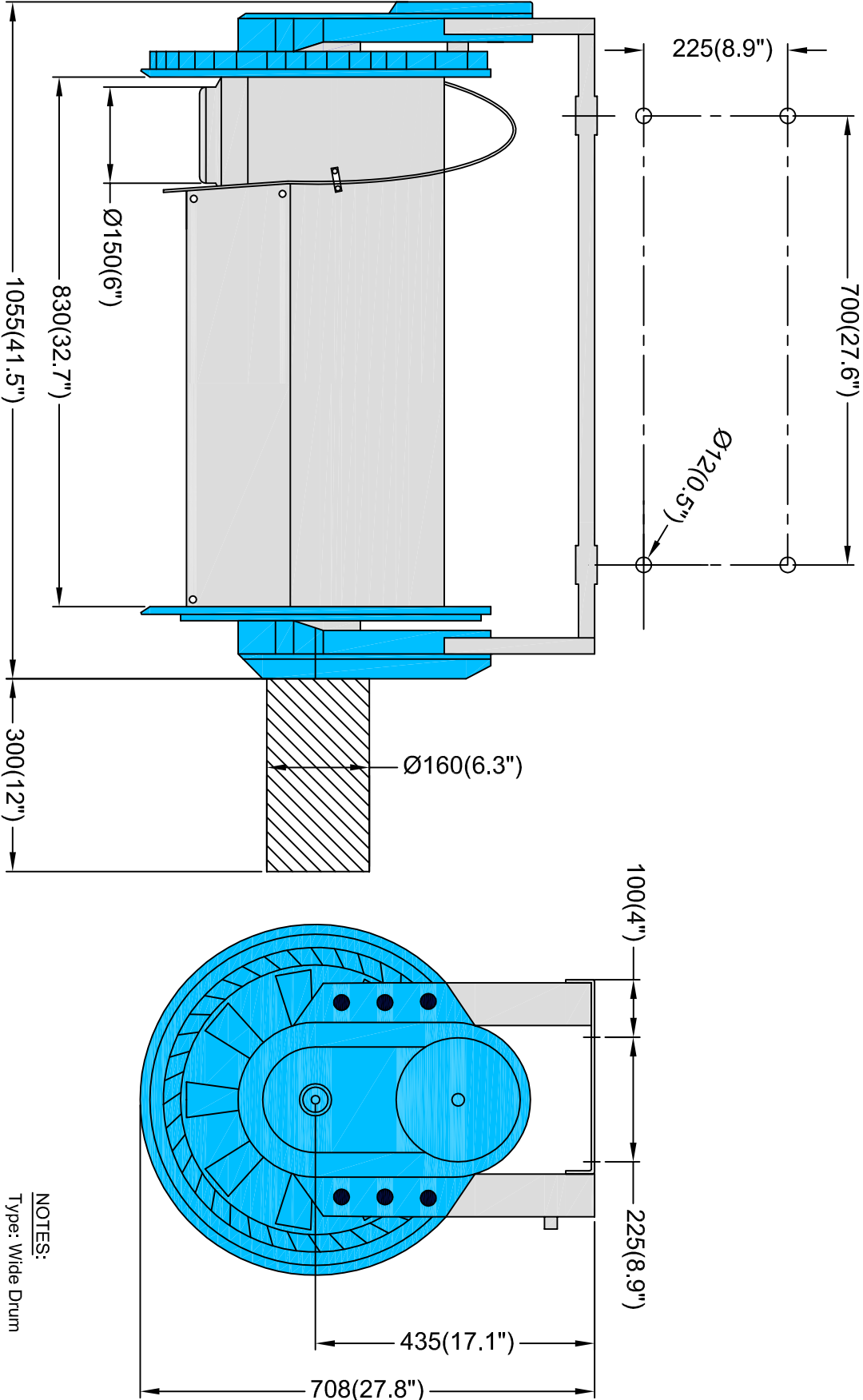
NOTES:
Type: Wide Drum
Total Weight without hose: 31 Kg (68 lbs)
Maximum retractable length on reel is 7 m

Qty:

All Dim. in mm (in)

JOB NAME:	Date: March-2010	DRW: D.Patel	DRW #:20809065
ENGINEER:	NEDERMAN, LLC - NORTH AMERICA		
CUSTOMER:	7775 McLoughlin Road Mississauga, ON, L5R 3P7 TEL: (905) 566-2200 FAX: (905) 566-2206		
	102 Transit Avenue Thomasville, NC 27360 TEL: (336) 821-0800 FAX: (336) 821-0890		

Nederman Exhaust Hose Reel - Spring Recoiled 865 (Wide Drum) - 20804265 without hose - Suitable for Hose Ø150 (6") & Max. Possible Length 10m (33')



Nederman Automatic Damper Included:

A Patented function operated by drum rotation. When the hose is pulled out , the damper opens for the airflow. When the hose starts to recoil , the damper stops the airflow. This leads to reduce sound level, more efficient utilisation of the fan capacity, and less extraction of heated or cooled air.

JOB NAME:	Date: March-2010	DRW: D.Patel	DRW #: 20804265
ENGINEER:	NEDERMAN, LLC - NORTH AMERICA 102 Transit Avenue Thomasville, NC 27360 TEL: (336)821-0800 FAX:(336)821-0890 www.NEDERMAN.COM		
CUSTOMER:	4404-A Chesapeake Drive Charlotte, North Carolina 28216 5775 McLoughlin Road Mississauga, ON, L5R 3P7 TEL: (905)566-2200 FAX:(905)566-2206		

NOTES:

Type: Wide Drum
 Total Weight without hose : 31 Kg (68 lbs)
 All Dim. in mm (in)

Nederman Telephone: (800) 533-5286 www.nederman.com	Technical Data	Date: 3-2022
		Project:
	NFC 4.2 Hose	
		Ref Name:



- E-Glass Base Cloth
- Silver Grey Silicone Coating
- Cloth Reinforced with V4A Wire
- Cross Twill Weave
- Good Light & UV Resistance
- Abrasion & Cut Resistant
- Water, Dirt & Oil Repellent
- Good Acid & Lye Resistance
- Weatherproof
- High Flexibility
- Exterior Galvanized Steel Helix
- Suitable for High Temperatures

The core is interlocked with a galvanized steel external helix and reinforced with hard-drawn spring steel wire filler. The coated silicone fabric is rated for high temperatures, weatherproof, water, dirt, & oil repellent and offers excellent resistance to acids and lyes. IEH Type 800HT is suitable for diesel exhaust, high temperature fume extraction and hose reel applications. This flexible duct also offers good abrasion, cut, light and UV resistance. The temperature range of IEH Type 800HT is - 22° F to + 800° F (- 30° C to 426° C). The base material has been oven tested to assure maximum temperature resistance.

Technical Data:

Colour & Coating

Base Fabric

Weave

Helix

Compression Ratio

Temperature Resistance Cold

Continuous Operating Temperature - Hot

Intermittent Operating Temperature - Hot

Silver Grey

E-Glass with V4A Wire

Cross Twill

Galvanized Steel

4:1

- 22° F (- 30° C)

+ 800° F (+ 426° C)

+ 875 F (+ 468° C)

4" NFC4.2	
4" X 16'	86900683
4" X 24'	86900684
4" X 33'	86900685

5" NFC4.2	
5" X 16'	86900687
5" X 24'	86900688
5" X 33'	86900689

6" NFC4.2	
6" X 16'	86900691
6" X 24'	86900692
6" X 33'	86900693

8" NFC4.2	
8" X 16'	86900694
8" X 24'	86900695
8" X 33'	86900696

NFC4.2 Weight Per Foot	
4"	0.9 lbs
5"	1.1 lbs
6"	1.3 lbs
8"	1.7 lbs

Nederman

IMPROVING YOUR WORKSPACE

102 Transit Ave.
Thomasville, NC 27361
Telephone: (800) 533-5286
Fax: (336) 821-0890
www.nederman.com

DIMENSIONAL DATA

08/06/2012

SS Nozzle With Lifting Sleeve and Clamp

DATE

PROJECT

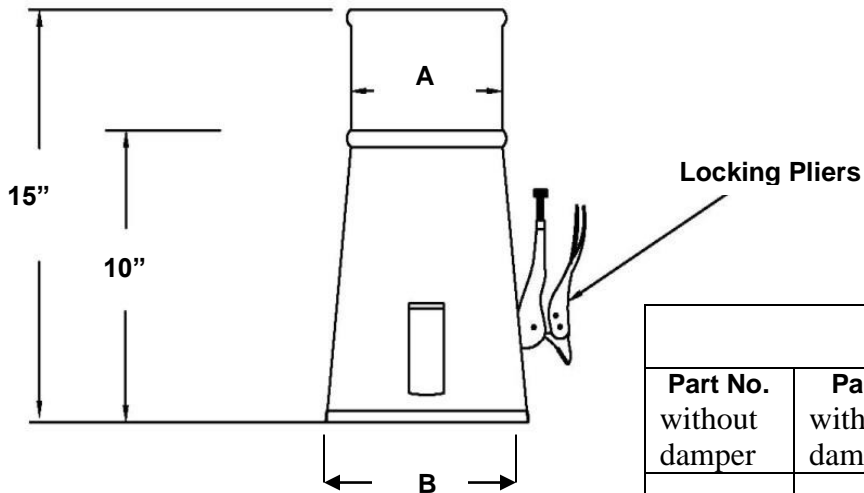
LOCATION

ARCH/ENG

REP. NAME

22 Gauge Stainless Steel Nozzle for 4", 5", 6" and 8" diameter hose

Nozzles include locking clamp and lifting sleeve.



Dimensions

Part No. without damper	Part No. with damper	Hose Connection	A	B
89298154		4"	3.8"	6"
89298082	89298102	5"	4.8"	7"
89298067	89298103	6"	5.8"	8"
89298076	89298104	8"	7.8"	10"
89299036	89298250	10	9.8"	12"

