WÖHLER

Operating Manual
Compressed air/water ductreel

US

Wöhler DH 420

Best.-Nr. 25935– 2026-03-23

Table of contents

1 General

1.1 Operation Manual Information

This operation manual allows you to safely work with the Wöhler DH 420 Pneumatic Ductreel. Please keep this manual for your information.

The Wöhler DH 420 Pneumatic Ductreel should be employed by professionals for its intended use only.

Liability is void for any damages caused by not following this manual.

1.2 Notes

WARNING!
Not following this warning can cause injury or death.

ATTENTION!
Not following this note can cause permanent damage to the device.

NOTE!
Useful information

1.3 Proper use

The Wöhler DH 420 Pneumatic Ductreel is equipped with a digital meter counter; it is designed to clean ventilation systems in conjunction with corresponding accessories and an air compressor.

When cleaning chimneys and ventilation systems lined with asbestos-based material the Wöhler DH 420 should be used in combination with the special sweeping unit for asbestos (see accessories) using water instead of compressed air. In such cases, the operating manual for the asbestos sweeping unit describes in detail the connections and how to use the unit.

Any other use is considered improper use.

1.4 Scope of supply

Device	Scope of supply
Wöhler DH 420	Pneumatic ductreel and integrated digital meter counter
	Compressed air hose with FRP core, 33 ft, with stop valve and coupling

1.5 Transport

Fig. 1: Lever in vertical position - transport lock

! CAUTION!
It is essential to activate the transport lock prior to transport!

- Turn the lever located on the right next to the display downward.

The transport lock is now activated and the compressed air hose cannot be pulled out of the ductreel.

Fig. 2: Lever in horizontal position - working position

! CAUTION!
Release the transport lock before pulling out the hose!

- Before using the ductreel, turn the lever located on the right next to the display to a vertical position.

The transport lock is now deactivated and the compressed air hose can be pulled out of the ductreel.

1.6 Information on disposal

Electronic equipment does not belong into domestic waste, but must be disposed in accordance with the applicable statutory provisions.

You may hand in any defective batteries taken out of the unit to our company as well as to recycling places of public disposal systems or to selling points of new batteries or storage batteries.

1.7 Manufacturer

Wöhler Technik GmbH

Wöhler-Platz 1

33181 Bad Wünnenberg

Tel.: +49 2953 73-100
Fax: +49 2953 73-96100
E-Mail: info@woehler.com

2 Technical data

Pneumatic ductreel

Description	Details
Weight (incl. 33 ft hose)	4.8 lbs
Braking	Freewheel brake, precisely adjustable

Compressed air hose

Description	Details
Length	33 ft
Reinforcing	FRP core

Ductreel cage

Description	Details
Diameter	16.5 inches
Material	Stainless steel, plastic cover

Digital meter counter

Description	Details
Unit of measurement	Meters or feet (m or ft)
Resolution	0.1
Battery	3.6 V long-life lithium battery

Compressor to be connected must fulfill the following requirements

Description	Details
Pressure	Min. 5 bar
Output capacity	25 m^3/h

3 Design and function

Fig. 3: Device components

Legend

1	Compressed air hose
2	Ductreel cage
3	Belt clip
4	Hose feed guide
5	Handle
6	Transport lock
7	Display
8	Star knob to adjust freewheel brake

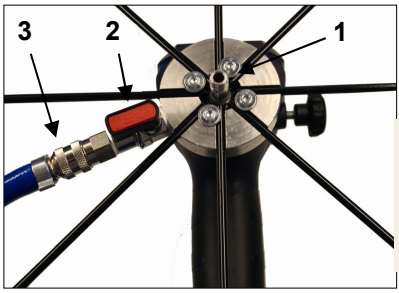

Fig. 4: Rear of device

1 Compressed air connection for compressor or hose reel

2 Stop valve for compressed air

! CAUTION!

Valve set to direction of flow (see Fig. 4): Opened

Valve set at right angles to direction of flow: Closed

3 Quick-release coupling for compressed air hose of ductreel

3.1 Function

Fig. 5: Application example: Cleaning ventilation ducts

With the Wöhler DG 420 Pneumatic Ductreel it is possible to clean both rectangular and round ventilation ducts with large or small tube cross-sections.

You can hold the lightweight ductreel by the handle as you work or attach the clip to your belt so both of your hands are free to work with.

Thanks to its FRP reinforcement the 33 ft long hose can easily be pushed into the ductwork.

The position of the end of the hose in the duct can be read off from the large display (digital meter counter).

Fig. 6: Hose reel - compressed air

With a 65 ft hose the Wöhler hose reel is connected between the compressor and the compressed air ductreel to enable the user to move around freely while working without having to move the compressor.

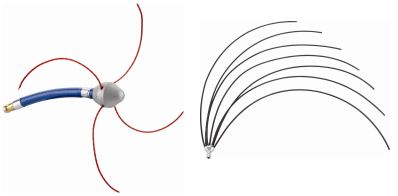

Fig. 7: Helicopter nozzle and compressed air whip

It is possible to insert a compressed air whip or helicopter nozzle (forwards or backwards) onto the end of the hose to perform the cleaning task effectively.

Fig. 8: Roller guide ball

The roller guide ball is deployed in wide, rectangular shafts, see accessories.

3.2 Layout of display and control button

Fig. 9: Display and control button

Description	
	1 Battery status
	2 Length extended
	3 Unit (meters or feet)
	4 Retract (▼) or extend (▲) hose
	5 Control button: Switch on, reset to zero, select unit

4 Preparing for use

4.1 Setting the freewheel brake

The freewheel brake makes it possible to wind the compressed air hose forward or back in a controlled manner. It prevents the hose unwinding off of the ductreel by itself.

Fig. 10: Star knob to adjust freewheel brake

The freewheel brake is set using the star knob located on the left of the display.

NOTE!
The freewheel brake is set ex works; generally speaking, it does not need to be adjusted.

To increase the braking effect

- Turn the star knob clockwise.

The hose will now no longer run so easily out of the cage.

To decrease the braking effect

- Turn the star knob counterclockwise.

You will now be able to pull the hose more easily out of the cage.

4.2 Connecting accessories

The end of the hose is fitted with a quick-release coupling for compressed air.

Attaching accessories

- Simply insert the Wöhler compressed air whip or the helicopter nozzle onto the quick-release coupling of the compressed air hose. Depending on the task at hand, fit the roller guide ball between the hose and the compressed air whip/nozzle.

Removing accessories

- To release the quick-release coupling simply grip and pull back the top sleeve.

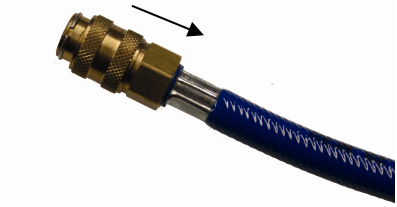

Fig. 11: Releasing the quick-release coupling

4.3 Connecting the hose reel and/or compressor

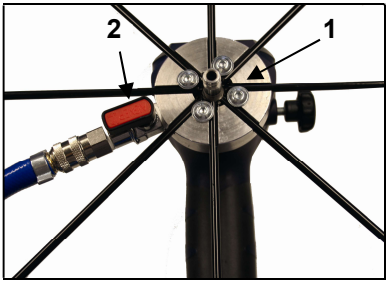

Fig. 12: Rear of device

1 Compressed air connection

2 Stop valve for compressed air

! CAUTION!

Valve set to direction of flow (see Fig.): Opened

Valve set at right angles to direction of flow: Closed

Insert the connecting piece of the compressor, the extension hose or the compressed air ductreel onto the compressed air connection (1), **Fehler! Verweisquelle konnte nicht gefunden werden.**

5 Operating

5.1 Switching the digital meter counter on / off

Fig. 13: Display with control button

- To switch the digital meter counter on and off press and hold the control button for approx. 2 seconds.

When switched on the battery status, the length the hose is extended, the direction the hose was last moved (▲ extend or ▼ retract) as well as the unit of measurement used to display the length are shown on the display.

NOTE!
The digital meter counter switches off automatically after 3 minutes if neither the hose is moved nor the control button is pressed on the ductreel. When it is switched on again the position 0.0 is displayed.

5.2 Selecting the unit of measurement

It is possible to choose between the units of measurement meters (m) and feet (ft). The last unit selected is always displayed when the device is switched on.

- To change the unit of measurement you must first switch off the device.
- Press and hold the control button for approx. 10 seconds until the new unit is shown in the display.

5.3 Zeroing

- To reset the extended length measurement to 0.0 press the control button briefly.

NOTE!
To ensure you are able to read precisely the length the hose is extended into the duct, we recommend you zero the display when the beginning of the hose is inserted into the duct.

5.4 Winding the hose forward and back

- Release the transport lock (see paragraph **Fehler! Verweisquelle konnte nicht gefunden werden.**).
- Carefully pull the hose out of the ductreel cage.

! CAUTION!
When pushing the hose back onto the ductreel make sure the hose is wound evenly across the width of the ductreel cage. Otherwise, the hose can spring out of the ductreel cage under certain circumstances, if it is wound predominantly onto one side.

⚠ WARNING!
Be cautious when handling the hose: The compressed air hose is reinforced with a FRP core; due to the inherent spring force it can whip to one side in a similar fashion to a rod.

5.5 Cleaning with compressed air

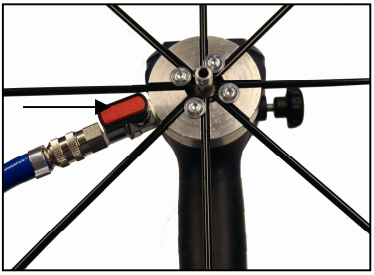

Fig. 14: Stop valve for compressed air opened

WARNING!
Check all connections before switching on the supply of compressed air.

Make sure all stop valves are closed before switching on the compressor.

- Switch on the compressor in accordance with the manufacturer's instructions, then open the red stop valve for compressed air.

CAUTION!
Valve set to direction of flow (see **Fehler! Verweisquelle konnte nicht gefunden werden.**): Opened

Valve set at right angles to direction of flow: Closed

You can now begin with cleaning.

WARNING!
Never touch nozzles or compressed air whips with your hands when the compressor is switched on.

6 Recommendations for cleaning with compressed air

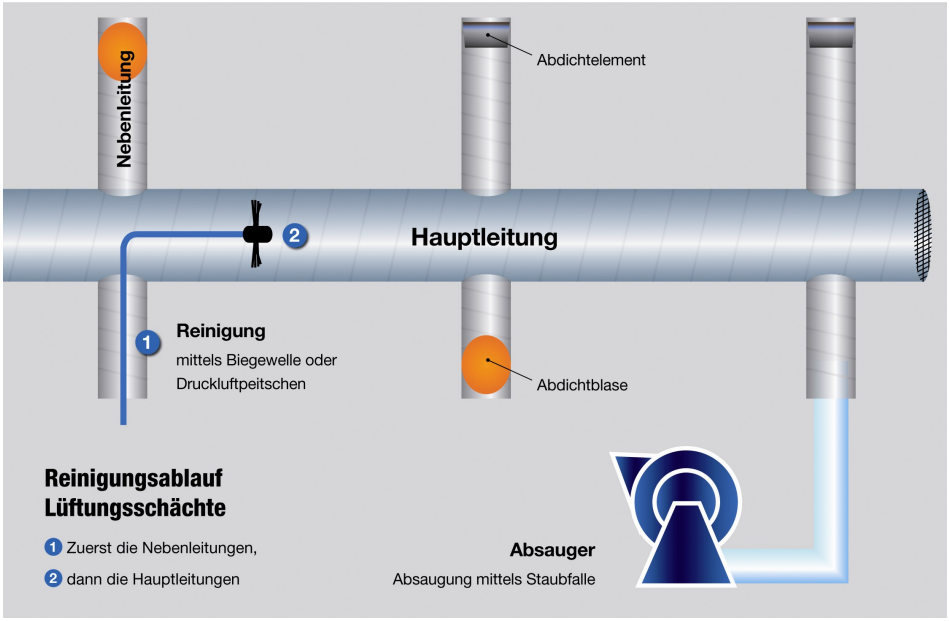

Fig. 15: Procedure for cleaning ventilation shafts

6.1 Sealing openings

Ductwork of ventilation systems consist of a main duct and a variety of branch ducts. The cleaning process is carried out employing negative air pressure; in other words, through suction extracting detached particles of dirt with a dust collector. Before beginning with cleaning you must ensure all open, unused branch ducts and bypass ducts are sealed; close any volume control dampers. Use sealing bladders for the purpose (see accessories).

6.2 Cleaning

The ducts are cleaned with compressed air working from the cleaning opening to the extractor (Wöhler dust collector SF 250). A stream of pressurized air from the compressor blows the dust from the walls of the ducts/shafts via the compressed air whips or nozzles.

Fig. 16: Cleaning ductwork with a roller guide ball and compressed air whip, dirt extracted with dust collector

The roller guide ball is used to clean shafts with wide corners. It is possible to steer the hose in all directions and into all corners with controlling hand movements.

7 Maintenance

The Wöhler Pneumatic Ductreel DH 420 is rugged by design so it only very rarely needs maintenance.

Maintenance list

Interval	Maintenance work
According to use	Replace hose
After 5-10 years	Replace battery
When soiled	Clean the hose, cage and ductreel handle with a damp cloth

7.1 Replace hose

- Unwind the hose to be replaced completely and release the quick-release coupling.

WARNING!
Exercise due care and attention when pulling out the hose: The last winding could be under tension and cause the hose to make a whipping movement.

- Insert the replacement hose in the quick-release coupling and wind the hose evenly onto the ductreel.

7.2 Replace battery

The digital meter counter is fitted with a long-life battery that only needs to be replaced every 5-10 years. The battery status is shown by the battery status indicator in the display. To replace the battery proceed as follows:

- Pull the frame away from the display.
- Carefully grip the display and pull it out along with the PCB and battery.
- Remove the battery from the rear of the PBC and connect a new 3.6 V lithium battery.
- Place the display along with the PCB and battery back in the original position.
- Put the frame of the display back in its position and press it securely into place.

Fig. 17: Replace battery

8 Warranty and Service

8.1 Warranty

Each Wöhler DH 420 will be tested in all functions and will leave our factory only after extensive quality control testing. The final control will be recorded in detail in a test report and delivered with any unit.

If used properly, the warranty period for the Wöhler DH 420 will be 12 month from the date of sale. The hose is not covered by this warranty, because it is a consumable.

This warranty does not cover the freight and packing costs when the device is sent to the factory for repair.

8.2 Service

Wöhler has built our reputation on excellence in customer service. Therefore, of course, we are readily available to assist you after the warranty period ends.

- Send us the device and we will repair it and return it to you with our package service.
- Immediate help is provided by our technical staff over the telephone.

9 Declaration of conformity

The manufacturer

WÖHLER Technik GmbH
Wöhler-Platz 1, D-33181 Bad Wünnenberg

declares that the product

Product: **Wöhler Pneumatic Ductreel**
Model: **DH 420**

complies with the key safety requirements set down in the guidelines of the Council for the Harmonization of the Legal Requirements of the Member States in relation to the electromagnetic compatibility (2014/30/EU).

The following standards were availed of to evaluate the product in respect of the electromagnetic compatibility:

DIN EN 61326-1, table 2 and 3
DIN EN 61326-1, table 2 and 3
DIN EN 61326-1, table 2
DIN EN 55011 class B group 1

Bad Wünnenberg, 04.11.2024

Dr. Michael Poeplau, Geschäftsführer/Managing Director