# WÖHLER

# CATALOG

PRODUCTS FROM THE MANUFACTURER
**MEASURE | INSPECT | CLEAN**

*WÖHLER*

*The Measure of Technology*

# WORKING TOGETHER

For over 80 years, the name Wöhler has been synonymous with quality and progressive innovations in the field of measuring instruments, visual inspection systems and cleaning equipment for heating, ventilation and facility management applications.

Working on the basis of many years of experience, close contact to customers, comprehensive skills in all technical disciplines, Wöhler develops products that are tailored to each customers needs. Chimney sweeps, plumbing, heating and air conditioning contractors, construction specialists and industrial customers worldwide rely on technology made by Wöhler.

As an international family-owned business, we closely cooperate with customers and vendors on a partnership basis. Continual growth and long-term success are assured by both trust based cooperation and a passion for technology.

*Elmar Schrader*

Elmar Schrader
President of Wohler USA Inc.

# HIGHLIGHTS

## POWERFULLY SIMPLE.
### Wohler A 550
**FLUE GAS ANALYZER**

Flue gas analysis at your finger tip

**Page 24**

## UNIQUELY CLEAN VIEW.
### Wohler VIS 350
**VISUAL INSPECTION SYSTEM**

Full color pan & tilt camera head with built-in recording and sonde, position indicator, home function and locator

**Page 68**

## PENETRATING VIEWS THROUGH CONCRETE AND ASPHALT.
### Wohler L 200
**LOCATOR**

Exact location of camera head

**Page 85**

## MODULAR POINT OF VIEW.
### Wohler VIS 400
**MODULAR VISUAL INSPECTION SYSTEM**

Professional visual inspection system

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# WOHLER WORLDWIDE



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# DEVELOPMENT

## FUTURE MADE BY WÖHLER

Our prescription for innovative product ideas is experience of many years, a lot of competence and fascination for technology. Also close cooperation with our customers and experts from business, trade organizations and universities are the basis for our long-lived products. Together we develop trend-setting and practice-oriented innovations for you for decades.

### HARDWARE & SOFTWARE DESIGN – IN LINE WITH STANDARD USAGE & THOUGHT OUT CAREFULLY

Devices must be easy to use. That is possible only with a proven technology. The mechanics, electronics, instrument software and the supporting PC-programs must be user-friendly. Therefore we stay in close contact with you – ultimately the most important and best suggestions for improvement come from practical applications.
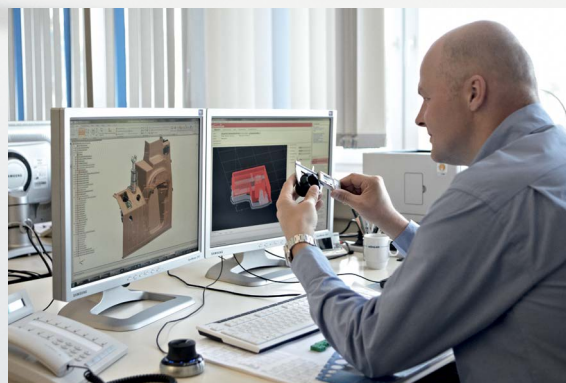
### CONSTRUCTION –
### INNOVATIVE & ACCURATE TO SIZE

Together manufacturing and production work hand in hand. Each product is designed three-dimensionally on the computer - both technical requirements and ergonomic aspects play a primary role. Prepared program data is transferred directly into our CNC machines that produce the mechanical components for your equipment - in this way we guarantee a fast and error free production process.

# PRODUCTION

## IDEAS BECOME REALITY

Production and development cooperate closely here - therefore we can react quickly and accurately to changes in the marketplace or customer requirements.  We can guarantee high quality and productivity through computer-controlled production methods and modern technology.
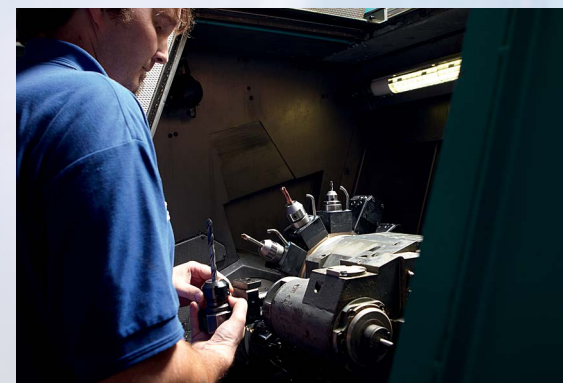
**CNC-MANUFACTURING – MODERN & EFFICIENT**

Precise, automatic and fast; those are three characteristics, which we value in our CNC machines. 'Computerized Numerical Control' means that the machines are electronically directed and regulated. Because that saves time and money, we offer our in-house produced devices at a fair price and at the highest level of technology.

**ASSEMBLY – CAREFUL & RELIABLE**

Reliable assembly is obvious with us. No equipment leaves our warehouse without detailed final inspection. This way we can guarantee that our instruments meet the highest standards and will serve our customers for many years. Absolute reliability is the basis for the bond of trust between you as a user and us as a manufacturer.

# SERVICES

## WE ARE THERE FOR YOU

As a manufacturer we develop, produce, advise and sell for you! Accurate answers are therefore our speciality. Thorough and continuous training ensure that our coworkers can support you before and after the purchase in a timely and competent manner. With us you are in good hands!
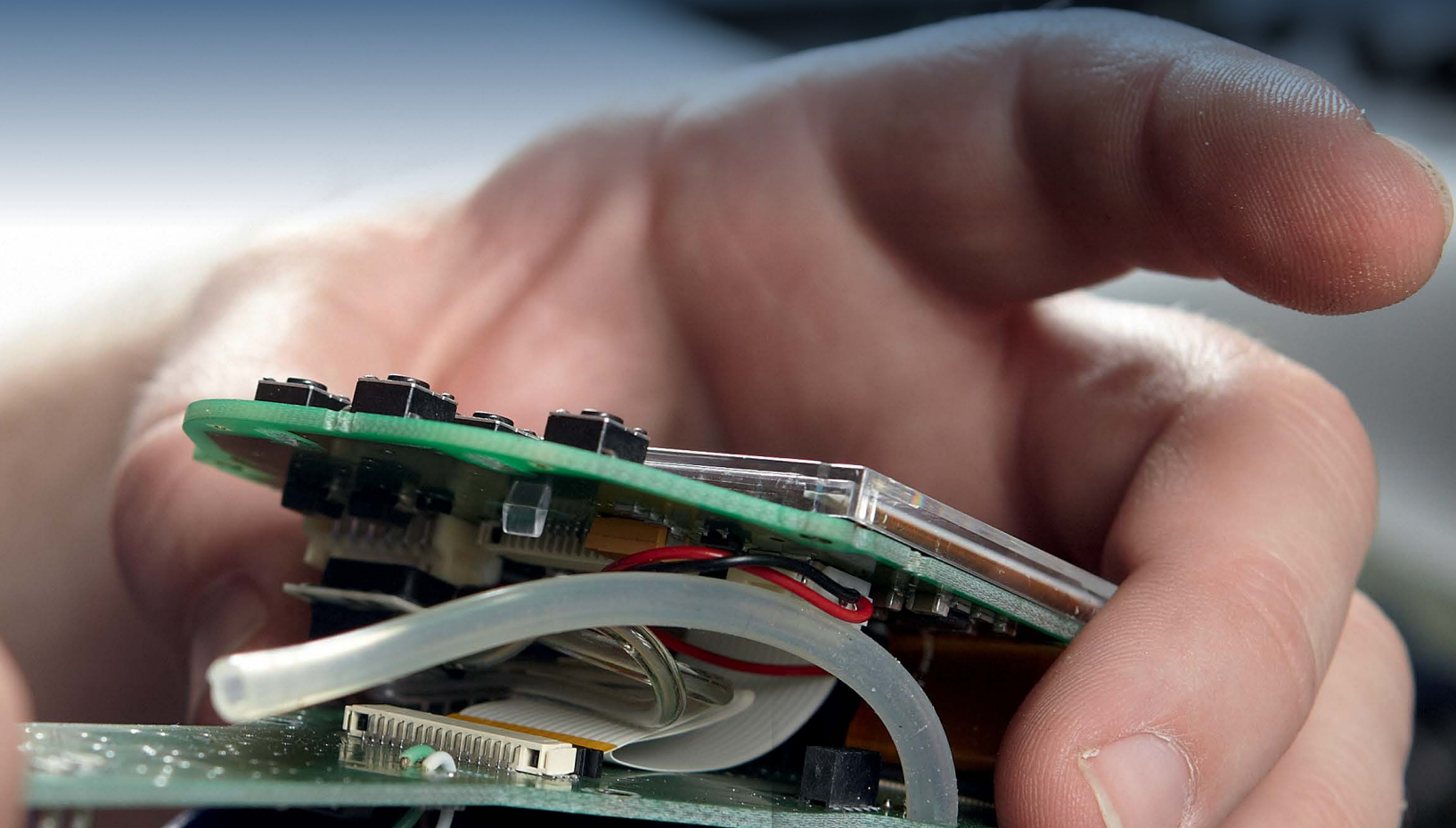
### CONSULTATION & SERVICE –
### INDIVIDUAL & COMPETENT

Each purchase decision should be well thought out. Therefore you can test our devices not only at trade shows or exhibitions, but you can also get detailed, individual advice by telephone or in our sales offices. Also in the case of service requirements we do not leave you alone: in our sales and service stations we help you directly and competently.

### DISPATCH & LOGISTICS –
### RELIABLE & PUNCTUAL

Our products should be delivered to you as fast as possible. Our coordinated  team - reliable coworkers and a well thought out management support system work so well together that in-stock orders will be shipped within 48 hours of receiving an order. Thanks to cooperation for many years with our logistics partners we guarantee that the products reach their new owner as fast as possible.

# APPLICATIONS

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

MEASURING INSTRUMENTS
LEAKAGE AND PRESSURE

MEASURING INSTRUMENTS
IAQ/BUILDING

VISUAL INSPECTION

SWEEP INSTRUMENTS

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

MEASURING INSTRUMENTS
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## MEASURING INSTRUMENTS - FLUE GAS ANALYSIS

# PRODUCT OVERVIEW FLUE GAS ANALYSIS

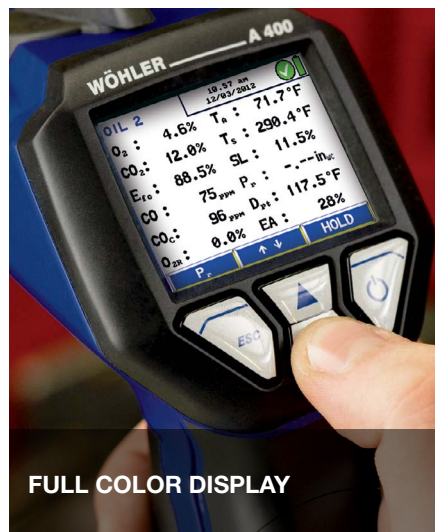| | Wohler A 400 L<br>Flue Gas Analyzer<br>page 20 | Wohler A 400PRO<br>Flue Gas Analyzer<br>page 21 | Wohler A 550 L<br>Flue Gas Analyzer<br>page 28 | Wohler A 550<br>Flue Gas Analyzer<br>page 29 |
|---|---|---|---|---|
| **APPLICATIONS** | | | | |
| Residential | • | • | • | • |
| Commercial | | | • | |
| Manifold and Differential Pressure | • | • | • | • |
| Tuning Guide | • | • | • | • |
| Data Management | • | • | • | • |
| | | | | |
| **SENSORS** | | | | |
| $O_2$ | 0...21% | 0...21% | 0...21% | 0...21% |
| CO | 0...10,000 ppm | 0...4,000 ppm | 0...35,000 ppm | 0...4,000 ppm |
| CO high | | | | 0...100,000 ppm |
| NO | | 0...1,000 ppm | 0...3,000 ppm | 0...3,000 ppm |
| $SO_2$ | | | | 0...5,000 ppm |
| $NO_2$ | | | | 0...1,000 ppm |
| Stack Temperature | 32...1,472 °F | 32...1,472 °F | -4...1,472 °F | -4...1,472 °F |
| Supply Air Temperature | -4...248 °F | -4...248 °F | -4...212 °F | -4...212 °F |
| Differential Pressure | 40.15 inWC | 40.15 inWC | 44.16 inWC | 44.16 inWC |
| Warranty | 2 years | 4 years | 4 years | 4 years |
| | | | | |
| **OPERATION FEATURES** | | | | |
| Touch-Screen | | | • | • |
| Full Color Display | • | • | • | • |
| Infrared port for printer | • | • | • | • |
| Bluethooth port for computer | | | | • |
| | | | | |
| **SAFETY FEATURES** | | | | |
| Self Diagnosis for Sensors (S) and Instrument (I) | • | • | • | • |
| CO-valve (V) and CO purge-pump (P) | | | | • |
| 4 or 6 Filter Technology | 4 | 4 | 4 | 4 |
| Filter and Pump Monitor | • | • | • | • |
| Field Replaceable Sensors (F) / Longtime Sensors (L) | F | F / L | F / L | F / L |

FLUE GAS ANALYSIS | WOHLER A 400

WOHLER A 400 | RESIDENTIAL AND LIGHT COMMERCIAL APPLICATIONS

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

MEASURING INSTRUMENTS
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SWEEP INSTRUMENTS

# GET A GRIP ON COMBUSTION WITH ONE HAND!

The Wohler A 400 Flue Gas Analyzers are multi-functional instruments (flue gas, differential pressure, ambient CO) for residential and light commercial applications. Its unique design allows a comfortable one-hand operation with a technician-friendly 4 button key pad. Integrated magnets make even a hands-free operation possible. Your eyes will love the brilliant full color OLED display which shows all combustion values on one screen. The self-diagnosis functions with an alarm makes the instrument reliable and failsafe. We provide a full 4 year warranty for the instrument and LT-Sensors.

**4** YEAR WARRANTY[1]

**10 h** BATTERY OPERATION

**>100** MEMORY DATA

PRINTER

SELF DIAGNOSIS

FILTER MONITORING

WÖHLER TUNING GUIDE

IR PORT

**FULL COLOR DISPLAY**

**WOHLER TUNING GUIDE**

**ONE-HAND OPERATION**

## FEATURES AND BENEFITS
- Color OLED display – all combustion data values on one screen
- Zoom function
- Integrated magnetic holder
- Technician-friendly 4 button keypad
- Ergonomic shape: comfortable one-hand operation
- Graphic function
- User selectable units for temperature, pressure and CO

## SAFETY / RELIABILITY
- Integrated 4-filter technology including water stop filter, cotton filter, sample conditioner and sensor protection
- LT-sensors
- Full 4 year warranty on instrument including sensors[1]
- Continuous self-diagnosis with feedback for:
  - All sensors
  - Instrument functions
  - Condensate

## DATA MANAGEMENT
- Memory for 100 customer records
- Date and time stamp

## VARIETY OF APPLICATIONS
- Wohler Tuning Guide with graphical support
- Combustion and efficiency analyzer for residential and light commercial applications
- Ambient CO tester
- Flue gas CO tester (CO air free)
- Differential manometer for chimney draft and appliance manifold pressure
- Graph feature for all combustion readings

## APPROVALS
- TÜV approved
- EN 50379-2
- EN 50379-1 for CO

## TECHNICAL DATA

**Oxygen ($O_2$)**
Sensor type ........................electrochemical
Range ...............................0.0...21.0 Vol.-%
Resolution ........................0.1 Vol.-%
Accuracy ............................± 0.3 Vol.-%

**Carbon monoxide (CO) (Wohler A 400[PRO])**
Sensor type ........................electrochemical
Range ...............................0...4,000 ppm
Resolution .........................1 Vol.-ppm
Accuracy ............................± 5 % f.m., absolute ±20 ppm

**Carbon monoxide (CO) (Wohler A 400 L)**
Sensor type ........................electrochemical
Range ...............................0...10,000 ppm
Resolution .........................1 ppm
Accuracy ............................± 10 % f.m., absolute ±40 ppm

**Nitric oxide (NO) (Wohler A 400[PRO])**
Range ...............................0...1,000 ppm
Resolution .........................1 Vol.-ppm
Accuracy ............................± 5 % f.m., ± 5 Vol.-ppm (<100 ppm)

**Draft / Differential Pressure (PD)**
Unit ..................................inWC / psi / Pascal / mbar
Range ...............................± 40 inWC
Resolution .........................0.004 inWC
Accuracy ............................± 2 % f.m., absolute ± 0.020 inWC

**Flue Gas Temperature ($T_s$)**
Unit ..................................°F / °C
Sensor type ........................thermoelement (NiCr-Ni)
Range ...............................-4 °F...1,472 °F
Resolution .........................0.2°F
Accuracy ............................32...257 °F: .........± 4 °F
                                257...482 °F:  ± 6 °F
                                482...752 °F:  ......± 8 °F
                                252...1472 °F:  ± 1.5 % f. m.

**Supply Air Temperature ($T_A$)**
Unit ..................................°F / °C
Sensor type ........................semiconductor (Si-PTC-Ni)
Range ...............................-4 °F...248 °F
Resolution .........................0.2 °F
Accuracy ............................±2 °F

**Calculated Values**
Effc. / SL: ..........................efficiency and losses calculated in accordance to ASME standards
ETA / QS: ..........................efficiency and losses calculated in accordance to EN European standards
$CO_2$ in Vol.-%: ....................range $O$ – $CO_2$max, resolution 0.1%
$CO_c$: ................................CO concentration ($COc_{corrected}$) air free, adjustable $O_{2ref}$ reference level
Dew point: .........................in °C / °F
λ / EA ...............................Lambda (theoretical air), Excess Air
$m_{COND}$ : ...............................condensate quantity in condensing conditions

**Work temperature** ............+41 °F...104 °F to meet specifications
**Storage temperature** .........-4 °F...122 °F
**Battery lifetime** ................AA batteries > 10 h (NiMH, 2000 mAh)
**Weight** ..............................1.4 lbs.
**Size** ................................8" x 3.3" x 8.7" (without probe)
**Length cable-hose** ............67"

[1] Wohler A 400/A400[Pro], except for thermocouples and batteries; for further information see our warranty guidelines

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MEASURING INSTRUMENTS FLUE GAS ANALYSIS

FLUE GAS ANALYSIS | WOHLER A 400 L

FLUE GAS ANALYSIS | WOHLER A 400PRO

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# Wohler A 400 L Flue Gas Analyzer

**2 YEAR WARRANTY[1]**

### APPLICATION:

- Combustion and Efficiency Analyzer for residential and light commercial applications

### ADVANTAGES:

- All combustion data values on a bright full color display
- Integrated magnetic holder
- Technician friendly 4 button keypad
- Ergonomic shape: comfortable one hand operation
- Integrated 4-filter technology including water stop filter, cotton filter, sample conditioner and sensor protection
- 2 year full warranty on instrument including sensors[1]
- Memory for 100 customer records
- Date and time stamp

[1] except thermocouple and batteries

### Wohler A 400 L Kit USA version

Wohler A 400 L

disposable AA batteries

Wohler TD 100 Thermal Printer

plastic case

➔ **Accessories on page 22**

**Part no. 4625**
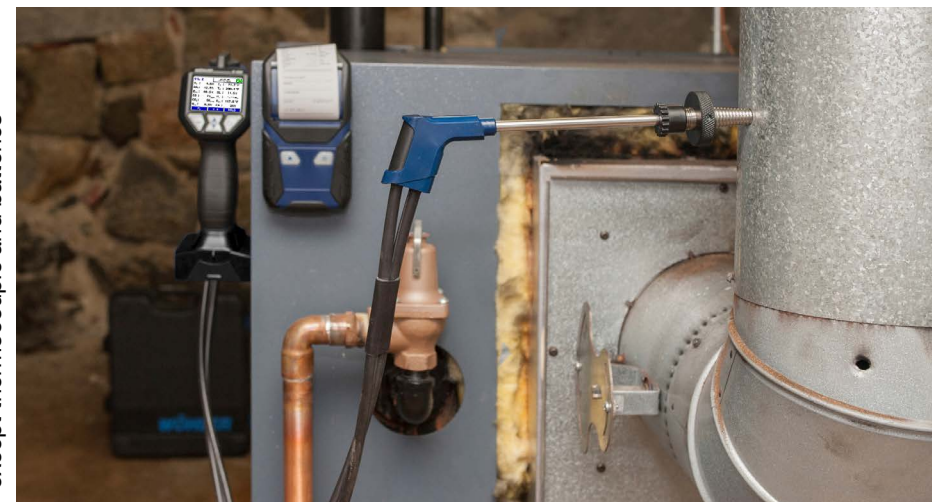
# Wohler A 400PRO Flue Gas Analyzer

**4 YEAR WARRANTY[1]**

### APPLICATION:

- Multifunctional Combustion Analyzer for residential and light commercial applications

### ADVANTAGES:

- LT-sensors (full 4 year warranty incl. sensors)
- Ergonomic shape: one hand operation with a 4 button key pad
- Brilliant OLED full color display technology
- Multi-functional: combustion and efficiency analyzer, ambient CO tester, flue gas CO tester (CO air free), differential manometer
- Safety: integrated smart filter technology, condensate control with LED warning light, sensor diagnostics, continuous self diagnosis with feedback

[1] except thermocouple and batteries

### Wohler A 400PRO USA Set 1 (Standard)

Wohler A 400PRO USA

probe/hose assembly

disposable batteries

water stop filter

25 cotton filters

heavy duty carrying case

➔ **Accessories on page 22**

**Part no. 3356**

### Wohler A 400PRO USA Set 2 (Advanced)

Wohler A 400PRO USA

probe/hose assembly

rechargable batteries

charger

water stop filter

25 cotton filters

cone

air temperature probe

Wohler TD 100 Thermal Printer

heavy duty carrying case

➔ **Accessories on page 22**

**Part no. 3359**

### Wohler A 400PRO USA Set 3 (Professional)

Wohler A 400PRO USA

probe/hose assembly

rechargeable batteries

charger

water stop filter

25 cotton filters

cone

air temperature probe

Wohler TD 100 Thermal Printer

Wohler RP 72 Smoke Test Kit

heavy duty carrying case

➔ **Accessories on page 22**

**Part no. 3361**

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

| Printer | Part no. |
|---|---|
| **Wohler TD 100 Thermal Fast Printer**<br>Infrared printer with 1 roll thermal paper and four batteries | 4160 |
| **Thermal Paper**<br>2.24" width, 10 rolls<br>for thermal printer Wohler TD 100 and TD 600 | 4145 |

| Probes / Cable Hoses | Part no. |
|---|---|
| **Air Temperature Probe 11"**<br>for Wohler A 600 / A 400<br>with 67" cable, to measure the supply air temperature especially in fire places independent of ambient air | 6019 |
| **Probe/hose assembly Wohler A 400**<br>V2<br>Probe and hose assembly for A 400 | 5576 |
| **Flexprobe Wohler A 400PRO with hose**<br>cable hose 67" with flexible probe 12" | 3241 |
| **Extension for cable hose**<br>Wohler A 400, 110" | 2077 |

| Cones | Part no. |
|---|---|
| **Clamping Cone**<br>for probes 8 mm dia<br>stainless steel, to stabilize the gas probe in the flue pipe | 2494 |
| **Threaded Cone**<br>for probes 8 mm dia | 2495 |
| **Plastic Cone**<br>for air temperature probe<br>for probes 8mm in dia, to stabilize air temperature probes in openings of 10-15 mm | 2463 |

| Charger / Batteries | Part no. |
|---|---|
| **Wohler A 400 / 500 Quick Charger**<br>for NiCd and NiMH rechargeables<br>with net adapter EU, US, GB. Charging period approx. 3 hrs. | 3302 |
| **Set of 4 rechargeable NiMh batteries**<br>2000 mAh for Wohler A 400/A500 | 9407 |

| Cases | Part no. |
|---|---|
| **Plastic case Wohler A 400L**<br>Plastic case for Wohler A400L | 4681 |
| **Plastic case Wohler A 400 USA**<br>Heavy duty carrying case, with twin wall for document storage, for A 400 | 3319 |

| Filter | Part no. |
|---|---|
| **Service bag Wohler A 400**<br>comes with:<br>1 water stop filter, 25 cotton filters, O-ring, cotton holder and filter connection | 3776 |
| **Water Stop Filters**<br>3 pack<br>for Wohler A 600 / A 500 / A 550 / A 400 | 9621 |
| **Wadding filters A 400**<br>pack with 150 pieces<br>for Wohler A 400 | 4288 |

| Cover Lables | Part no. |
|---|---|
| **Round foil test hole seals**<br>Ø 1.1" Aluminium<br>(100 pcs) | 4964 |

| Sensors | Part no. |
|---|---|
| **O$_2$ sensor Wohler A 400**<br>O2 sensor, field replaceable, 1 year warranty | 3354 |
| **CO sensor Wohler A 400**<br>CO sensor, field replaceable, 4,000 ppm, 1 year warranty | 3368 |

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FLUE GAS ANALYSIS

FLUE GAS ANALYSIS | WOHLER A 550

FLUE GAS ANALYSIS | WOHLER A 550

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

# POWERFULLY SIMPLE  `NEW`

## Wohler A 550 Flue Gas Analyzer

As robust as cast iron, but as easy to operate as a smartphone – that's what Wohler's new flue gas analyzer feels like in your hand. Appropriately, the advantages are equally substantial: A tap of your finger on the Wohler A 550 is all that is required to perform analyses, inspections and settings on residential and commercial appliances. The flue gas analyzer is equipped with coded connections for the 4 Pa test and even »NEW AND UNIQUE« a wood moisture content measurement function to VDI Guideline 4206 (VDI = Association of German Engineers).

**4 YEAR WARRANTY[1]**

**EASY TO USE WITH A CLEAR DESIGN**
Flue Gas Analysis is child's play.

**ROBUST & WEAR-RESISTANT**
The analyzer is able to withstand a thing or two.

---

**TÜV-CERTIFIED** · **4 YEAR WARRANTY[1]** · **ROBUST HOUSING** · **4 FILTER TECHNOLOGY** · **DATA TRANSFER USB & BLUETOOTH®** · **4 Pa TEST**

## PRODUCT BENEFITS
- Simple to use: Switch on – read off – done
- Large, color touchscreen: Displays up to 14 measurement and calculation values
- Intuitive to operate via on-screen keyboard
- Calibrate in the flue gas pipe via a fresh air pump (Wohler A 550)
- Graphic hot spot search

## EXTREMELY RELIABLE
- Effective condensate protection
- Automatic CO clean out pump protects CO sensor (Wohler A 550)
- 4-filter technology – easily accessible
- Analyzer and sensor diagnostics
- Sensor replacement – user-friendly
- Rechargeable battery operating time: more than 12 h with Lithium Ion power
- Hose assembly – robust and flexible

## HUGE RANGE OF APPLICATIONS
- Expandable with up to 5 sensors
- For measurements: NO, $NO_2$, $SO_2$
- Insertion probe for a variety of measurement tasks
- Spillage Test and much more
- First Flue Gas Analyzer incl. wood moisture content measurement (wood moisture probe included in scope of supply of Wohler A 550)

## SIMPLE DATA MANAGEMENT
- 1,000 measurement records
- Data transfer via USB, Bluetooth or infrared

**TUNING GUIDE**

**PRINT PREVIEW**

**WOOD MOISTURE**

**BACKDRAFT TEST**

## TÜV-APPROVED
- TÜV By RgG 297, EN 50379-2, VDI 4206, EN 50379-1 for CO



**PRINTING OUT THE RESULTS OF MEASUREMENT**
Printing out the results on the spot with the Wohler TD 100 Thermal Printer.

**SECURE & RELIABLE**
The Wohler A 550 Combustion Analyzer with protective hinged lid.

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

FLUE GAS ANALYSIS| WOHLER A 550

FLUE GAS ANALYSIS| WOHLER A 550

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## THOSE SPECIAL EXTRAS



**LARGE 7" COLOR TOUCHSCREEN**
All results of measurement at a glance - Simple to use menu navigation: Switch on - read off - done.
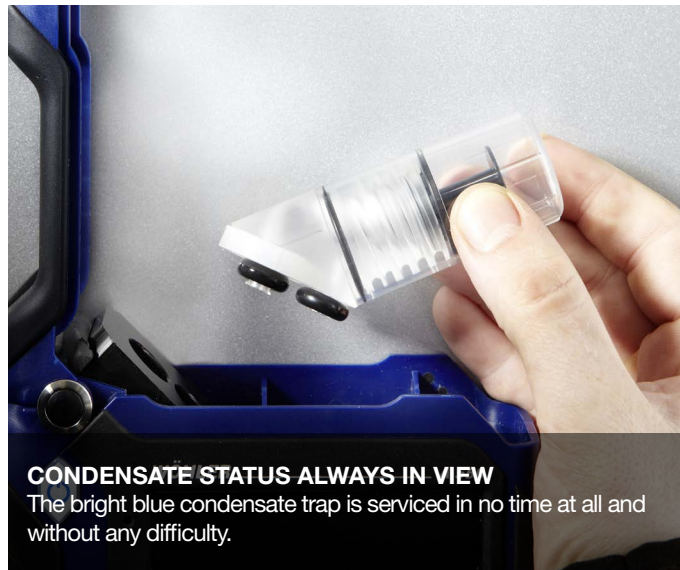


**CONDENSATE STATUS ALWAYS IN VIEW**
The bright blue condensate trap is serviced in no time at all and without any difficulty.
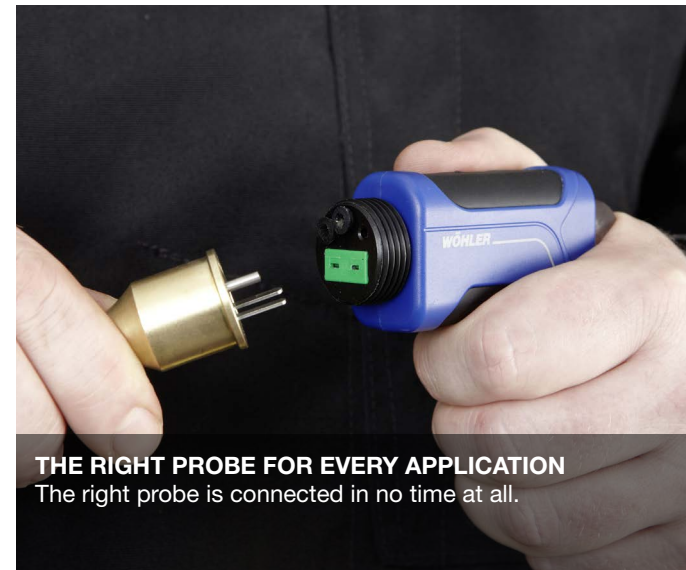


**THE RIGHT PROBE FOR EVERY APPLICATION**
The right probe is connected in no time at all.



**CONVENIENT PLUG-IN CONNECTION**
Analysis, temperature and draft – 3 functions in a single hose: Simply plug them together and fold down the protective lid again.



**START /STOP BUTTON ON THE PROBE HANDLE**
When measuring in difficult conditions, you can also simply stop and save the measurement at the press of the button on the probe handle.

| Wohler | A 550 | A 550 L |
|---|---|---|
| **Applications** (depends on accessories) | | |
| Flue Gas Analysis | ● | ● |
| 4 Pa-test | ● | |
| Wood moisture | ● | ● |
| Backflow check | ● | ● |
| Wohler Tuning Guide | ● | ● |
| Possible sensors | 5 | 3 |
| **Functionality** | | |
| 7" color touchscreen | ● | ● |
| Fresh air pump, simultaneous hot spot search and calibration | ● | |
| Start-/stop function at probe | ● | |
| 1,000 measurement records | ● | ● |
| USB & infrared | ● | ● |
| Bluetooth® | ● | |
| CO clean out pump | ● | |
| **Reliability** | | |
| 4-year sensor and analyzer guarantee[1] | ● | ● |
| Analyzer self diagnostics | ● | ● |
| Field replaceable sensors | ● | ● |
| Visual filter alarm | ● | ● |
| Lithium Ion rechargeable battery with up to 12 h battery operating time | ● | ● |
| **Scope of supply** | | |
| Interchangeable probe with 67" hose assembly and plug-in probe 12" | ● | |
| Probe with 67"hose assembly and fixed probe 11" | | ● |
| Combustion air temperature probe | ● | optional |
| Wood Moisture Probe | optional | optional |
| Pressure measurement adapter for 4 Pa test | optional | |
| 1 water stop filter and 1 coarse filter | ● | ● |
| Rechargeable battery and USB battery charger | ● | ● |
| Case | ● | ● |

●= included

[1] Except thermocouple, rechargeable battery and special sensors; for further information please read our warranty guidelines.

## TECHNICAL DATA

**Oxygen concentration ($O_2$) in flue gas**
Display ............................... Volume % referenced to dry flue gas
Measurement principle ......... Electrochemical sensor
Range ................................. 0.0-21.0 vol. %
Accuracy ............................. ± 0.3 Vol.-%
**Carbon monoxide (CO 4,000 ppm) in flue gas (Wohler A 550)**
Display ............................... Volume ppm referenced to dry flue gas
Measurement principle ......... Electrochemical sensor
Range ................................. 0-4,000 vol. ppm; resolution 1 vol. ppm
Accuracy ............................. ±20 ppm (< 400 ppm), otherwise 5% of reading
**Carbon monoxide (CO) in flue gas (Wohler A 550 L)**
Display ............................... Volume ppm referenced to dry flue gas
Measurement principle ......... Electrochemical sensor
Range ................................. 0-35,000 vol. ppm; resolution 1 vol. ppm
Accuracy ............................. ± 100 ppm (< 1,000 ppm),
                                                        otherwise 10% of reading (with $H_2$ < 5% of reading)
**Carbon monoxide ($CO_{high}$) in flue gas (optional)**
Display ............................... Volume ppm referenced to dry flue gas
Measurement principle ......... Electrochemical sensorr
Range ................................. 0-100,000 vol. ppm; resolution 1 vol. ppm
Accuracy ............................. ± 100 ppm (< 1,000 ppm),
                                                        otherwise 10% of reading (with $H_2$ < 5 % of reading)
**Nitric oxide concentration (NO) in flue gas (optional)**
Display ............................... Volume ppm referenced to dry flue gas
Measurement principle ......... Electrochemical Sensor
Range ................................. 0-3,000 vol. ppm (continuously up to 1,000);
Resolution ........................... 1 vol. ppm
Accuracy ............................. ±5 Vol.-ppm (<100 ppm), otherwise 5 % of reading
**Nitrogen dioxide concentration ($NO_2$) in flue gas (optional)**
Display ............................... Volume ppm referenced to dry flue gas
Measurement principle ......... Electrochemical sensor
Range ................................. 0-1000 vol. ppm (continuously up to 200); resolution 1 vol. ppm
Accuracy ............................. ±5 vol. ppm (< 100 ppm), otherwise 5 % of reading
**Sulfur dioxide ($SO_2$) in flue gas (optional)**
Display ............................... Volume ppm referenced to dry flue gas
Measurement principle ......... Electrochemical sensor
Range ................................. 0-5,000 vol. ppm; resolution 1 vol. ppm
Accuracy ............................. ± 10 vol. ppm (0...200 ppm), otherwise 5 % of reading
**Chimney draft / differential pressure (PD) with 4 Pa test (Wohler A 550)**
Display ............................... inWC
Measurement principle ......... Semi-conductor diaphragm
Range ................................. 0.00 to ± 44.16 inWC; resolution 0.004 inWC (< 4.01 inWC),
                                                        otherwise 0.004 inWC, with ventilation loss measurement 0.004 inWC
Accuracy ............................. 0.0012 inWC (< 0.04 inWC), otherwise 3 % of reading
                                                        Drift < 0.00081 inWC in 5 minutes
**Chimney draft / differential pressure (PD) (Wohler A 550 L)**
Display ............................... inWC
Measurement principle ......... Semi-conductor diaphragm
Range ................................. 0.00 to ± 44.16 inWC; resolution 0.004 inWC
Accuracy ............................. 0.008 inWC (< 0.16 inWC), otherwise 5 % of reading
**Flue gas temperature ($T_G$)**
Display ............................... °F
Measurement principle ......... Thermocouple (NiCr-Ni) (NiCr-Ni)
Range ................................. -4 °F to 1,472 °F; resolution 32.18 °F
Accuracy ............................. 32-271.4 °F: ± 35.6°F
                                                        271.4-1,472 °F: ± 1.5 % of reading
**Combustion air temperature ($T_A$)**
Display ............................... °F
Measurement principle ......... Thermocouple (NiCr-Ni)
Range ................................. -4 °F to 212 °F; resolution 32.2 °F
Accuracy ............................. ± 33.8°F
**Wood moisture**
Display ............................... Mass of water referenced to dry fuel mass
Measurement principle ......... Electrical resistance measurement
Range ................................. 10.0-40.0%; resolution 0.1%
Accuracy ............................. ±40% of reading tested to VDI 4206 Part 4
**Power supply** .................... Lithium-Ion, rechargeable battery 3.7 V, 5800 mAh,
                                                        charges via USB
**Battery operating time** ...... Approx. 12 h (depends on operating status and display illumination)
**Storage temperature** ......... -4 °F to +122 °F
**Operating temperature** ...... +41-104 °F to maintain stated accuracy
**Weight** .............................. 2.75 lbs
**Dimensions** ...................... 8.7" x 6.3" x 2.2" (without probe)
**Length of cable-hose:** ....... 67"

# Wohler A 550 L Flue Gas Analyzer

**4 YEAR WARRANTY[1]**

## APPLICATION
- For burner adjustment and determination of combustion loss
- For residential and commercial applications
- Burner maintenance

## ADVANTAGES
- Large 7"color-touch screen: Displays up to 14 measurement and calculation values
- Intuitive to operate via on-screen key-board
- Data transfer via integrated USB- & IR-Interface
- Large CO-measurement range: 35,000 ppm
- Robust plastic case for safe transport

**ROBUST HOUSING** | **4 FILTER TECHNOLOGY** | **USB MMC/SD** | **PRINTER**

### Wohler A 550 L Flue Gas Analyzer USA

Wohler A 550 L USA

hose 5.6 ft

gas probe 0.9 ft

USB charger with micro USB cable

Li-Ionen battery

water stop filter

coarse filter

25 wadding filters

case

➔ **Accessories on page 30**

**Part no. 7753**

### Wohler A 550 L Flue Gas Analyzer USA with Wohler TD 100 Thermal Fast Printer

Wohler A 550 L USA

hose 5.6 ft

gas probe 0.9 ft

USB charger with micro USB cable

Li-Ion battery

water stop filter

coarse filter

25 wadding filters

Wohler TD 100 Thermal Fast Printer

case

➔ **Accessories on page 30**

**Part no. 7754**

# Wohler A 550 Flue Gas Analyzer

**4 YEAR WARRANTY[1]**

## APPLICATION
- Flue gas analysis
- Backflow Check (optional)
- Wood Moisture Measurement
- 4 Pa-Test

## ADVANTAGES
- Large 7"color-touch screen: Displays up to 14 measurement and calculation values
- Intuitive to operate via on-screen key-board
- Data transfer via integrated Bluetooth®-, USB- & IR-Interface
- Start-/Stop-Button on the probe handle – When measuring in difficult conditions, you can also simply stop and save the measurement at the press of the button on the probe handle
- 1,000 measurement records
- Huge range of applications: NO, $NO_2$, $SO_2$ (in connection with the Wohler Peltier cooler), ...

**ROBUST HOUSING** | **4 FILTER TECHNOLOGY** | **DATA TRANSFER USB & BLUETOOTH®** | **PRINTER**

### Wohler A 550 Flue Gas Analyzer USA with Wohler TD 100 Thermal Fast Printer

Wohler A 550 USA

hose 10 ft

gas probe 1 ft

air temperature probe

clamping cone

USB charger with micro USB cable

Li-Ion battery

water stop filter

coarse filter

25 wadding filters

Wohler TD 100 Thermal Fast Printer

case

➔ **Accessories on page 30**

**Part no. 7757**

### Wohler A 550 Flue Gas Analyzer USA with NO/NO₂ with Wohler TD 100 Thermal Fast Printer

Wohler A 550 USA

NO and $NO_2$ sensor

hose 10 ft

gas probe 1 ft

air temperature probe

clamping cones

USB charger with micro USB cable

Li-Ion battery

water stop filter

coarse filter

25 wadding filters

Wohler TD 100 Thermal Fast Printer

case

➔ **Accessories on page 30**

**Part no. 7764**

### Wohler A 550 Flue Gas Analyzer USA NO/NO₂/SO₂ with Wohler TD 100 Thermal Fast Printer

Wohler A 550 USA

NO, $NO_2$ and $SO_2$ sensor

hose 10 ft

gas probe 1 ft

air temperature probe

clamping cone

USB charger with micro USB cable

Li-Ion battery

water stop filter

coarse filter

25 wadding filters

Wohler TD 100 Thermal Fast Printer

case

➔ **Accessories on page 30**

**Part no. 7765**

## Wohler A 550 Upgrade Kit — Part no.

**Wohler A 550 Upgrade Kit** — 7758
Wohler A 550 air temperature probe 11" with 67" cable, clamping cone

## Probes — Part no.

**Wohler A550 air temperature probe** — 5511
11", with 67" cable

**Wohler Probe 20"** — 9614
Wohler A 550/A 500/ A 97

**Wohler Probe 12"** — 9622
Wohler A 550/A 500/ A 97

**Wohler Probe 7"** — 9613
Wohler A 550/A 500/ A 97

**Wohler Probe 5"** — 9652
Wohler A 550/A 500/ A 97

**Wohler Flexible Probe 12"** — 3242
Wohler A 550 / 500

**Wohler A 550 dew point indicator probe** — 5512

**Wood Moisture Probe Wohler A 550** — 5513

**Hose assembly 10 ft** — 7179
for Wohler A 550 Gas Probe

## Cones — Part no.

**Magnetic Holder** — 6142
for air temperature probes

**Clamping Cone** — 2494
for probes 8 mm dia
stainless steel, to stabilize the gas probe in the flue pipe

**Plastic Cone** — 2463
for air temperature probe
for probes 8mm in dia, to stabilize air temperature probes in openings of 10-15 mm

## Flue Gas Preparation — Part no.

**Filter granulate** — 4398
for BHKW Filter Wohler A 550
3.4 oz

**Peltier cooler Wohler A 550 / A 400** — 5535
incl. power supply

**Extension Wohler Cable hose** — 2076
Wohler A 550 L, 9 ft

## Printer — Part no.

**Wohler TD 100 Thermal Fast Printer** — 4160
Infrared printer with 1 roll thermal paper and four batteries

**Thermal Paper** — 4145
2.24" width, 10 rolls
for thermal printer Wohler TD 100 and TD 600

## Charger — Part no.

**Charger Wohler A 550** — 5502

## Cases — Part no.

**Plastic case Wohler A 550 L** — 5516

**Wohler A 550 Heavy duty carrying case** — 5577
twin-wall case
Heavy duty carrying case, with twin wall for document storage, for Wohler A 550

## Consumables — Part no.

**Water Stop Filters** — 9621
3 pack
for Wohler A 600 / A 500 / A 550 / A 400

**Coarse Filters** — 9632
pack with 5 pieces
for Wohler A 600 / A 500 / A 550

**Wadding filters A 400** — 4288
pack with 150 pieces
for Wohler A 400

## Sensors — Part no.

**$O_2$ sensor Wohler A 550** — 5594
field replaceable

**CO-Sensor 4,000 ppm Wohler A 550** — 8166
field replaceable

**CO-Sensor 35,000 ppm Wohler A 550 L** — 4496
field replaceable

**$CO_H$ sensor 100,000 ppm Wohler A 550** — 5596
field replaceable

**NO sensor Wohler A 550** — 5597
field replaceable

**$NO_2$ sensor 3,000 ppm Wohler A 550** — 5598
field replaceable

**$SO_2$ sensor 5,000 ppm Wohler A 550** — 5665
field replaceable

# Wohler RP 72 Smoke Test Pump





## APPLICATION

For measuring the soot level manually

## ADVANTAGES

- Rugged and reliable 10 stroke Soot Test Pump
- Long hose: ideal for difficult to reach measurement openings
- Non centered soot spot, allows many tests on one filter, easy to compare
- 2 filter technology

**rugged · reliable · established**

### Wohler RP 72 Smoke Test Pump

Wohler RP 72 Smoke Test Pump

3 ft hose

extraction probe 9"

➔ Accessories on page 33

**Part no. 2412**

### Wohler RP 72 Smoke Test Pump Kit

Wohler RP 72 Smoke Test Pump

40" hose

extraction probe 7.9"

smoke spot comparison scale

threaded cone

oil test bottle

servicing oil

300 filter papers

short wadding

long wadding

probe brush

➔ Accessories on page 33

**Part no. 9152**

| Accessories | Part no. |
|---|---|
| **Probe holder with 9" probe** for Wohler RP 72 includes spiral | 7547 |
| **Probe connector** for Wohler RP 72 | 3879 |
| **Spiral** for Wohler RP 72 probe | 20401 |
| **Probe brush 6 mm dia** for Wohler RP 72 | 2419 |

| Cones | Part no. |
|---|---|
| **Threaded Cone** for probes 8 mm dia | 2495 |
| **Clamping Cone** for probes 8 mm dia stainless steel, to stabilize the gas probe in the flue pipe | 2494 |

| Soot Test Comparison Scale | Part no. |
|---|---|
| **Wohler RP 72 Soot Spot Comparison Scale** from soot number 1 to 10 | 2416 |

| Consumbables | Part no. |
|---|---|
| **Soot test filters, bag with 300 pcs** for Wohler RP 72 | 2415 |
| **Wohler RP 72 Filter Paper Dispenser** with 300 pieces of filter paper | 3700 |
| **Wadding Filters** for Wohler A 500 / RP 72 condensate trap, pack with 150 pieces | 5290 |
| **Wohler RP 72 Wadding Filters Long** pack with 150 pieces | 621 |
| **Special servicing oil** for Wohler RP 72 | 2418 |

WOOD AND BUILDING MATERIALS MOISTURE | WOHLER HF 300

WOOD AND BUILDING MATERIALS MOISTURE | WOHLER HBF 420

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# Wohler HF 300 Wood Moisture Meter

## APPLICATION

The Wohler HF 300 is an easy to use instrument for determination of wood moisture. Depending on the kind of wood the needles can be pushed up to 3/16" into the log.

### TECHNICAL DATA

| | |
|---|---|
| **Display** | LCD |
| **Range** | 5 % to 40 % |
| **Accurancy** | ±1% absolute |
| **Needle length** | 0.5" |
| **Operating temperature** | 42 to 112 °F |
| **Weight** | 0.5 lbs. |
| **Current supply** | 9 V battery |
| **Size** | 5" x 1.7" x 0.8" |

### Wohler HF 300 Wood Moisture Meter

Wohler HF 300 Wood Moisture Meter

9V battery

protective bag

1 pair of replacement pins

**Part no. 7180**

| Accessories | Part no. |
|---|---|
| **6 pairs of Replacement Pins**<br>for Wohler HF 300 | **7181** |

# Wohler HBF 420 Moisture Meter

## APPLICATION

With its unique combination of electrical resistance measuring technique and dielectric measurement the Wohler HBF 420 wood and building materials moisture meter represents an ideal hand-held instrument to assess the moisture content of materials in a wide range of applications:

- Building diagnostics: Damage analysis, leak detection
- Building work: Preparatory measurements before applying paint, installing floor coverings etc.
- Fuel management: Assessing wood fuel materials

## ADVANTAGES

- Ability to assess building and wood moisture with one instrument
- Dielectric measuring technique, ideal to quickly assess moisture and measure the moisture profiles of building materials
- Resistance measurements to precisely determine the moisture content of wood
- Automatic temperature compensation after entering the material temperature
- Wood species correction via material codes
- Calibration kit facilitates on-the-spot measurement value verification
- Adjustable alarm threshold

### TECHNICAL DATA

**Resistence measurement wood**

| | |
|---|---|
| Range | approx. 0 to 40 % |
| Needles | 0.5", 10 kind of wood |

**Dielectrical measurement (non destructive)**

| | |
|---|---|
| Effective depth | approx. 1.2" – 1.6"<br>20 material codes |
| Alarm | 3 color LED (green, yxellow, red),<br>adjustabe limit |
| Auto-Off-Function: | adjustable |
| **Operation conditions** | 32...+104 °F, < 90 % r.H. |
| **Size** | 6.5" x 2.4" x 1.0" |
| **Weight** | 0.4 lbs (without batteries) |
| **Power Supply** | 4 x 1.5 V AAA-batteries |

### Wohler HBF 420 Moisture Meter for wood and building materials

Wohler HBF 420 Moisture Meter

2 replacement electrodes

4 batteries 1.5 V AAA

leather bag

**Part no. 8440**

| Accessories | Part no. |
|---|---|
| **Pair of replacement pins**<br>for Wohler HBF 420 | **3661** |

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# PRODUCT OVERVIEW LEAKAGE AND PRESSURE

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| **APPLICATIONS** | | | | | |
| Measurement of Gas Leakage | • | | • | | |
| Manifold and Differential Pressure | • | • | | | |
| Flow Measurement in ducts and chimneys | | from approx. 2.0 m/s | | | |
| Backdraft Testing | | | | | • |
| 4 Pa-test for supply air | | • | | | |
| Ambient Air Quality | | | | CO | |
| CO Concentrations in rooms and workplaces | | | | • | |
| Datalogger for pressure and temperature | | • | | | |
| Oil throughput measurement on burner | | | | | |
| **SENSOR SPECIFICATIONS** | | | | | |
| Differential Pressure | ± 800 inch WC | | | | |
| Air Flow | | | | | |
| Temperature (internal/external) | external 0...212 °F | internal 0...150 °F<br>external 0...1,472 °F | | | -40 °F...212 °F |
| Humidity | | 0...100 % r.H. | | | |
| CO | | | | | |
| Methane/Propane | | | • | • | |
| | | | | | |
| **FEATURES** | | | | | |
| Infrared port to connect with printer | | • | | | |

# Wohler DM 2000 Digital Manometer

Part no. 7006

Part no. 7335

## TECHNICAL DATA

**Pressure:**
Range: .................................± 800.00 inch WC
Accuracy:............................± 3% o.r.
± 0.02 inch WC
whichever is greater
Resolution: ...........................0.01 inch WC

**Temperature (optional):**
Range: .................................0 to 212 °F
Accuracy:............................better than 4 °F
Resolution: ...........................0.1 °F

**Dimensions:**
Size: .....................................2.2" x 6.6" x 2."
Weight: ...............................1 lbs.
Power: ...............................2 AA batteries

## APPLICATION

- Measures gas line and manifold pressure
- Fine tune burners with 0.01" WC resolution
- Measure draft and differential pressure
- Troubleshoot and balance HVAC systems
- Measure temperature with optional probe

## Advantages:

- Simple one button operation
- Wide measurement range (± 800.00" WC)
- Measures differential pressure
- IrDA output to PC/PDA
- Optional temperature measurement
- German technology designed for and by the American Technician

**Wohler DM 2000 Digital Manometer
US Version**

Wohler DM 2000 Digital Manometer

5 ft. hose

Part no. 7006

**Wohler DM 2000 Digital Manometer Kit
US Version**

Wohler DM 2000 Digital Manometer

5 ft. hose

rubber boot

hand loop

batteries (installed)

carrying case

Part no. 7335

## Accessories

| | | Part no. |
|---|---|---|
| | **Wohler Air Temperature Probe, plug**<br>A 500 / A 97 / E 98 / DC 100 / DC 2000 / DM 2000 | 9605 |
| | **Air Temperature Probe, 4" probe**<br>4 ft. cable<br>A 500 / A 97 / E 98 / DC 100 / DC 2000/ DM 2000 | 9651 |
| | **Combustion Air temperature probe, 11"**<br>for Wohler DM 2000 / Wohler A 550<br>with 5 ft. cable | 9611 |
| | **Magnetic rubber boot**<br>for Wohler DM 2000 / DC 2000 | 7202 |
| | **Carrying Case**<br>Internal size 9.6" x 6.3" x 2.6"<br>mini plastic case with protection foam | 7204 |
| | **Handloop**<br>Hand Loop w/ swivel E98 | 9805 |

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# Wohler DC 410FLOW Pressure Differential & Flow Meter

## APPLICATION
- One instrument for measurement of pressure, air flow, temperature and relative humidity
- Is tested to comply with standards for 'Ventilation for buildings – test procedures & measuring methods for handing over installed ventilation and air conditioning systems'

## ADVANTAGES:
- Brillant full colour OLED display
- Technician friendly one hand operation with 4 button keypad
- Highly accurate with 'no drift technology'
- Pressure resolution of 0.01 inch WC
- Differential temperature with two probes
- Data logger function
- USB port

### TECHNICAL DATA

**Differential Pressure:**
Range:............................± 40 inWC
Accuracy:.......................± 3 % o.r.,
 absolute ± 0.002 inWC
Resolution:.....................0.001 inWC between
 ±4.000 inWC;
 0.01 inWC

**Air speed:**
Range:............................0.3 m/s to 120 m/s
Continuous density correction:
 automatic, with temperature signal

**Temperature (internal sensor):**
Range:............................0 °F to 150 °F
Accuracy:.......................± 2 °F
Resolution:.....................0.1 °F

**External temperature probe:**
Range:............................2 channels, 0°F to 1,472 °F
Accuracy:.......................± 1.5% o.r., absolute 4 °F
Resolution:.....................0.1 °F

**Relative humidity:**
Range:............................0 % bis 100 % r.H. (relative humidity), non condensing
Accuracy:.......................< ± 2 % r.H., at 0 to 90 % r.H., otherwise < 3 % r.H.
Resolution:.....................0.1 % r.H.

**Barometric Pressure:**
Range:............................± 120.44 inWC bis 441.61inWC
Accuracy:.......................< ± 0.60 inWC
Resolution:.....................0.04 inWC

**Batteries:**....................4 AA rechargeable batteries or 4 AA disposable batteries
**Interfaces:**...................USB interface for data transfer to a PC. It is possible to transfer the data directly from the meter to the Wohler TD 100 Thermal Printer.
**Operating temperature:**.....41...104 °F
**Dimensions:**.................3.2" x 9" x 2.4"

### Wohler DC 410FLOW US-Version
### Standard Version

Wohler DC 410Flow Pressure Differential & Flowmeter
rechargeable batteries
charger
2 capillary hoses
plastic case
➔ Accessories on page 43
**Part no. 9286**

## Accessories | Part no.

**S-Tube Probe** — 9244
for Wohler DC 4xx
for measuring the flow speed, including: temperature probe

**Pitot tube**
for Wohler DC 410 and Wohler DC 2000PRO
length 14", 0.3" diameter — 9487
length 20", 0.3" diameter — 9488
length 39", 0.3" diameter — 9489

## Accessories | Part no.

**Wohler Flexible Capillary 3 m** — 4515
Wohler A 400, A 600, DC 100PRO, DC 410
for differential pressure measurement between adjoining rooms.
1 x capillary hose 3 m, connector, silicone hose

**Wohler TD 100 Thermal Fast Printer** — 4160
Infrared printer with 1 roll thermal paper and four batteries

**Thermal Paper** — 4145
57 mm width, 10 rolls
for thermal printer Wohler TD 100 and TD 600

## Accessories | Part no.

**Surface Temperature Probe** — 6679
for Wohler DT 310 / A 400 / DC 410Flow
with clamp, range up to 212 °F, clamp for pipes 0.2" - 1.4" diameter

**Special Wall Temperature Probe Type W-02** — 4651
for Wohler A 400 or Wohler DT 310

**Special Wall Temperature Probe Type W-02** — 4718
angulate
for Wohler DT 310 / A 400 / DC 410Flow

**Surface tempeature probe TF1** — 6625
for Wohler A 500 / DT 310 / DC 410Flow
Thermoelement type K, up to max. 392 °F

**Surface temp. probe TF2** — 6626
for Wohler A 500 / DT 310 / DC 410Flow
Thermoelement type K, up to max. 932 °F

**Surface temp. probe TF3 angulate** — 6628
for Wohler A 500 / DT 310 / DC 410Flow
Thermoelement Typ K, up to max. 932 °F

**Penetration temp. probe TF4** — 6629
for Wohler A500 / DT 310 / DC 410Flow
Thermoelement type K, up to max. 1,112°F

**Flue gas temp. probe TF5** — 6635
for Wohler A 500 / DT 310 / DC 410Flow
Thermoelement type K, up to max. 1,652°F

# Wohler GS 220 Gas Sniffer

## TECHNICAL DATA

**Sensitivity:** .........................40 ppm
**Sensor:** .............................Semiconductor
**Indicators:**.........................acoustic signal and optically
by stage-LED
**Flex holder:** ........................18"
**Warm up time:** ...................max. 50 sec.
**Refresh time:** ....................2 sec.
**Work temperature:** .............23...113 °F
**Supply:**.............................4 AA batteries, 1.5 V
**Size:** ...............................6.6" x 2.5" x 1.4"
**Weight:**............................1.5 lbs

## APPLICATION

- Leakage detection at gas lines
- Examination of heating systems and exhaust ways on combustible gases

## ADVANTAGES:

- Calibrated for methane (CH4) and liquid petrol gas (LPG) (2 indicator scales)
- Optical and acoustical output
- 16" flexible goose neck for easy access of hard to reach spots
- Highly sensitive and fast response

**Wohler GS 220 Gas Sniffer**

Wohler GS 220 Gas Sniffer

7.3" gooseneck

batteries

plastic case

**Part no. 6606**

# Wohler CM 220 CO-Meter

## APPLICATION:

- Test CO leakage from furnaces, water heaters, stoves
- Measurement of CO concentration in the ambient air
- MWC-Value-Measurement (Maximum Workplace Concentration)

## ADVANTAGES:

- Quick response for testing safe entry conditions
- Easy operation-one button, manual zero
- Visual and acoustic indicators
- Backlight
- Precise electrochemical sensor
- Calculation of the MWC-value (Maximum Workplace Concentration)

## TECHNICAL DATA

**Range:**................................0...999 ppm
**Accuracy:**...........................±20 % at 0...99 ppm
±15 % at 100 - 500 ppm
**Resolution:**........................1 ppm
**Supply:**..............................3 AAA batteries
**Response time:**..................up to 60 sec.
**Humidity range:**................5 - 99 % r.H.
(non-condensing)
**Storage temp.:**..................-40...158 °F
**Operating temp.:**...............14...140 °F
**Size:**................................6.9" x 1.9" x 1.1"
**Weight:**............................0.5 lbs

**Wohler CM 220 CO-Detector**

Wohler CM 220 CO-Detector

**Part no. 6613**

# Wohler TI 410 Dew Point Indicator
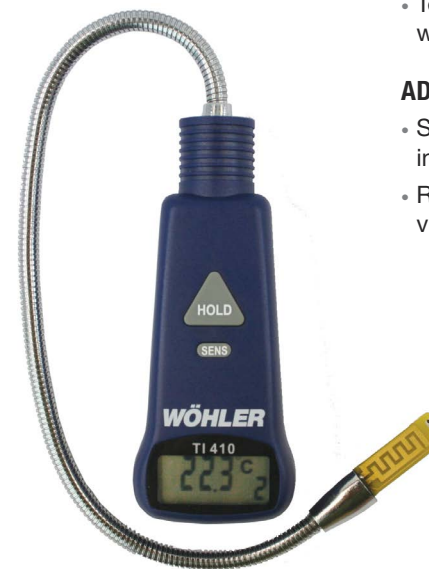
## APPLICATION:

- Testing for backdraft conditions between the chimney and the boiler room.

## ADVANTAGES:

- Ssmall sensor plate for inaccessible locations
- Reliable result through 3 indicators: visual, audible and temperature raise

## TECHNICAL DATA

**Temperature:**
Range:...............................-40...212 °F
Resolution:.........................0.1 °F
Accuracy:...........................0.1 °F

**Size:**
Housing: ............................4.8" x 2.4" x 1"
Flexarm: .............................12"
Sensor plate: ......................0.4" x 1.2"
Weight: ..............................1 lbs
Supply: ...............................9 V block battery

**Wohler TI 410 Dew Point Indicator with 17" flex arm**

Wohler TI 410 Dew Point Indicator

**Part no. 6808**

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

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| **APPLICATION** | | | | | | | | | |
| Air velocity / flow rate in ductwork | | | | • | | | | • | • |
| Differential temperature measurement, e.g. flow/return | • | | • | | | | | | |
| Evaluation of the efficiency of an air ventilation system | | | | | | • | • | • | • |
| CO-impact in rooms, workplaces & garages | | | | | | | • | | |
| Air humidity measurement in rooms & air ducts | | | • (room) | | • | • (room) | • (room) | | • (room) |
| Surface temperature measurement | • | • | • | | | | | | |
| Building material moisture measurement | | | • | | | | | | |
| Mold potential | | | • | | | | | | |
| | | | | | | | | | |
| **MEASURED VARIABLES / INSTRUMENT TECHNOLOGY** | | | | | | | | | |
| Air velocity | | | | • | | | | • | • |
| Flowrate | | | | • | | | | • | • |
| Temperature | • | • | • | • | • | • | • | • | • |
| Air humidity | | | • | | • | • | • | | • |
| Dew Point/Wet bulb temperature | | | • | | | | • | | • |
| $CO_2$ | | | | | | • | • | | • |
| CO | | | | | | | • | | |
| Data-interface printer, PC | | | • (PC) | | • (printer) | • (PC) | • (PC) | | |
| Datalogger | | | | | | • | • | | |
| PC-Software | | | • | | | • | • | | |

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

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MEASURING INSTRUMENTS IAQ/BUILDING

# Wohler DT 310 Differential Temperature Meter



## APPLICATION
- Simple measurement of differential temperature
- Temperature measurement of flow and return surface temperature of water and flue lines

## ADVANTAGES
- Display of differential temperature (two probes required)
- Simultaneous display of both temperature readings
- Optional temperature probes, classes K, J, T
- Run / Hold Function
- Back light
- MIN and MAX memory with date and time stamp

### TECHNICAL DATA

**Resolution**

| | | |
|---|---|---|
| K | -200...1,200 °F | 0.1 °F |
| | 1,200...2,500 °F | 1 °F |
| J | -200...930 °F | 0.1 °F |
| | 930...1,400 °F | 1 °F |
| T | complete range | 0.1 °F |

**Accuracy**

| | | |
|---|---|---|
| K | -200...2,500 °F ± 0.3 % f.m. + 0.7 °F | |
| J | -200...1,400 °F ± 0.3 % f.m. + 0.7 °F | |
| T | -200...734 °F ± 0.3 % f.m. + 0.7 °F | |
| Supply | 1 x 9 V Block battery | |
| Humidity | 0...85 % RH (not condensing) | |
| Operating temperature | 32...122 °F | |
| Size | 7" x 3" x 1" (LxWxT)) | |

## Wohler DT 310 Differential Thermometer

Wohler DT 310 Differential Thermometer

2 surface probes (type K)

battery

plastic carrying case

**Part no. 6622**

| Temperature Probes | Part no. |
|---|---|
| **Special Wall Temperature Probe Type W-02** for Wohler A 400 or Wohler DT 310 | **4651** |
| **Surface tempeature probe TF1** for Wohler A 500 / DT 310 Thermoelement type K, up to max. 392 °F | **6625** |
| **Surface temp. probe TF2** for Wohler A 500 / DT 310 Thermoelement type K, up to max. 932 °F | **6626** |
| **Surface temp. probe TF3 angulate** for Wohler A 500 / DT 310 Thermoelement Typ K, up to max. 932 °F | **6628** |
| **Penetration temp. probe TF4** for Wohler A500 / DT 310 Thermoelement type K, up to max. 1,112 °F | **6629** |
| **Flue gas temp. probe TF5** for Wohler A 500 / DT 310 Thermoelement type K, up to max. 1,652 °F | **6635** |
| **Surface Temperature Probe** for Wohler DT 310 / A 400 / DC 410[Flow] with clamp, range up to 212 °F, clamp for pipes 0.2" - 1.4" diameter | **6679** |

# Wohler IR Temp 210 Infrared Thermometer



## APPLICATION
Non-contact temperature measurement of surfaces

## ADVANTAGES
- Detection of heat sinks
- Measurement focus ratio Ø 10:1
- Laser-pointer
- Back light
- Adjustable emission factor
- Quick response time

### TECHNICAL DATA

| | |
|---|---|
| Range | -40...+932 °F |
| Accuracy | ±2 % o.r., absolute ±4 °F |
| Resolution | 0.1 °F |
| Reaction time | 500 msec. |
| Display | LCD, 3 figure |
| Emission factor | 0.30 - 0.99 adjustable |
| Supply | 9 V battery |
| Size | 7" x 3" x 2" |

## Wohler IR Temp 210 Infrared Thermometer

Wohler IR Temp 210 Infrared Thermometer

battery

hand loop

**Part no. 6612**

# Wohler IR Hygrotemp 24



## APPLICATION
- Non-contact surface temperature measurement
- Measurement of air temperature and relative humidity
- Dew point and wet bulb calculation

## ADVANTAGES
- One instrument for evaluation of the room climate
- Determination of air temperature, humidity and wall temperature via infrared measuring
- IR temperature measurement ratio 8:1
- Adjustable emissivity factor 0.30...0.99
- Calculation of dew point temperature, temperature difference, wet bulb temperature and dew point distance temperature

### TECHNICAL DATA

| | |
|---|---|
| Temperature range | 4...140 °F |
| Accuracy | ± 1 °F |
| Resolution | 0.1 °F |
| Infrared Temperatue range: | -40...932 °F |
| Accuracy | ± 2 % o.r., absolute ± 4 °F between -4...842 °F; ±3% or ± 3 °C f.m. |
| Resolution | 0.1 °F |
| Response time | 500 msec. |
| Ratio | 8:1 |
| Humidity range | 0 to 100% (not condensing), ± 3 % at 10...90 %, rest ± 5 % |
| Resolution | 0.1 % |
| Wet bulb temperature | -8 to 122 °F |
| Emission factor | 0.30...0.99 adjustable |
| Display | 3 line LCD |
| Current supply | 4 x 1.5 V AAA battery |
| Size | 7" x 2" x 3" |
| Weight | 0.6 lbs (without case) |

## Wohler IR Hygrotemp 24

Wohler IR Hygrotemp 24

batteries

plastic case

**Part no. 6603**

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

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# Wohler TA 420 Thermoanemometer

### APPLICATION

• Measurement of airspeed, flow and temperature

### ADVANTAGES

• 2 simultaneous values
• Telescopic probe
• Auto-off function

### TECHNICAL DATA

**Flow velocity**

| | |
|---|---|
| Range | 0.2 – 20.0 m / sec |
| | 0.7 – 72.0 km / h |
| Resolution | 0.1 m / sec |
| | 0.1 km / h |
| Accuracy | ± 5 % |

**Flow rate**

| | |
|---|---|
| Range | 0 – 1,271,329.2 cfm |
| Resolution | 0.035 – 35.31 cfm |
| Accuracy | 0.00 – 30.0 m² |

**Air temperature**

| | |
|---|---|
| Range | 0 – 122 °C |
| | 32 °F – 122 °F |
| Resolution | 0.1 °C |
| | 0.1 °F |
| Accuracy | ± 33.44 °C |
| | ± 1.5 °F |
| Size | 8" x 3" x 1.5" |
| Weight | 1.14 lbs |
| Current supply | 4 x AA batteries |

### Wohler TA 420 Thermoanemometer

Wohler TA 420 Thermoanemometer

telescope tube

4 batteries

1,5 V Typ AA

plastic case

**Part no. 4605**

| Air Flow Funnels | Part no. |
|---|---|
| **Air Flow Funnel K120**<br>for Wohler A 600 / TA 420<br>range 29.43 - 706.32 cfm<br>size 1.5 x 1.5 x 2 ft | 53789 |
| **Air Flow Funnel K35**<br>for Wohler A 600 / TA 420<br>range 5.886 - 235.44 cfm<br>size 0.7 x 0.7 x 1 ft | 53794 |
| **Air Flow Funnel K 75**<br>for Wohler A 600 / TA 420<br>range 17.658 - 441.45 cfm<br>size 1 x 1 x 1.2 ft | 53793 |
| **Air Flow Funnel K 150**<br>for Wohler A 600 / TA 420<br>range 29.43 - 1,177.2 cfm<br>size 1.8 x 0.3 x 2 ft | 53788 |

# Wohler RF 220 Hygrotemp

### APPLICATION

• Quick test of relative humidity within buildings and offices
• Air conditioning test
• Building inspection for mold and other humidity related problems
• The dew point and wet bulb temperature are calculated online from the current air humidity and temperature

### ADVANTAGES

• Remote probe
• Hold function
• Min/max/average memory
• Backlight

### TECHNICAL DATA

**Range**

| | |
|---|---|
| Rel.Humidity | 0...99 % r.H. |
| Temperature | 14...140 °F |
| Dew point | -100...140 °F |
| Wet bulb temp. | 8...140 °F |

**Accuracy**

| | |
|---|---|
| Rel. Humidity | ± 3 % r.H. (10 - 90 %) |
| | otherwise ± 5 % r.H. |
| Temperature | ± 1 °F |
| Storage temperature | 0...+140 °F |
| Operating temperature | 32...112 °F |
| Weight | 0.6 lbs |

### Wohler RF 220 Hygrotemp

Wohler RF 220 with probe

4 x AAA batteries

plastic carrying case

**Part no. 6615**

| Accessories | Part no. |
|---|---|
| **Calibration Set**<br>for Wohler RF 220 / KM 410<br>33% and 75 % humidity reference<br>not for IR Hygrotemp 24! | 6605 |
| **Relative Humidity Remote Probe**<br>Wohler RF 220 | 6624 |

**WÖHLER**

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# Wohler CDL 210 $CO_2$-Datalogger

**DATA LOGGER**
$CO_2$, HUMIDITY, TEMPERATURE



## TECHNICAL DATA

**$CO_2$-Measurement**
Range....................................0 - 2,000 ppm
Resolution:............................1 ppm
Accuracy: ............................± 50 ppm ± 5 %

**°F-Measurement**
Range....................................14...140 °F
Resolution: ...........................0.1 °F
Accuracy: ............................. ± 0.9 °F

**Measurement of air humidity**
Range....................................5 - 95 % r.H.
Resolution...........................0.1 % r.H.
Accuracy ...............................77 °F and 10-90 %
                                        ± 3 % r.H.
                                        otherwise: ± 5 % r.H.

**List of measurement readings**
                                        5,300 readings

**Logrates** ..........................3/10/30 Sec.
                                        1/3/10/30 min.
                                        1/3/4 h.

## APPLICATION
- Determination of the indoor air quality through combination of measurement and identification of:
  - The $CO_2$-concentration
  - The air temperature
  - The air humidity
- For $CO_2$-monitoring of:
  - Housing spaces (comfortableness, humidity problems, etc.)
  - Conference rooms and lounges (e.g. schools)

## ADVANTAGES
- Comfort level indicator with adjustable alarm values
- Acoustical and visual alarm function with adjustable limit
- Large display to show $CO_2$, humidity, temperature, date / time
- Max/Min-values
- Infrared-$CO_2$-measurement
- Automatic calibration function
- Non-volatile memory



**Wohler CDL 210 $CO_2$-Datalogger**
**$CO_2$, humidity and temperature**
Wohler CDL 210 $CO_2$ Datalogger

power supply

data cable

PC software

**Part no. 6648**
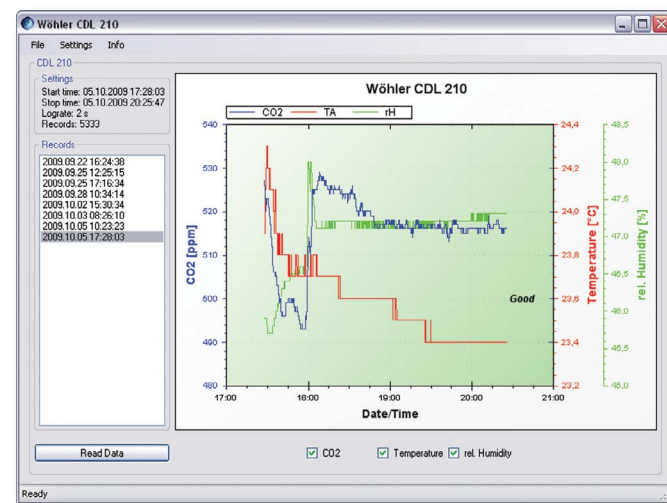
# Wohler KM 410 Indoor Air Quality Meter

**HIGH ACCURACY**

**DATA LOGGER**
$CO_2$, CO, HUMIDITY, TEMPERATURE



## APPLICATION
The Wohler KM 410 Indoor Air Quality Meter is the perfect instrument for verifying HVAC system performance and air ventilation control.

It measures:
- $CO_2$-content
- Air temperature
- Air humidity
- CO-content
- Dew point
- Wet bulb temperature

## ADVANTAGES
- Big LC display with blue backlight to use in dark area
- Acoustical and visual alarm function
- Max/Min-values
- Hold function freezes current readings
- Mini USB output to PC for analysis
- Data logger
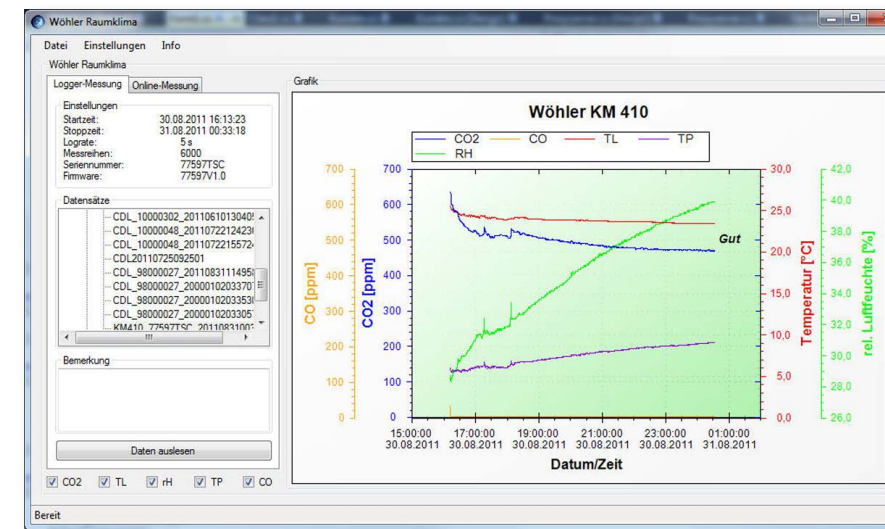
## TECHNICAL DATA

**$CO_2$-Measurement (NDIR-Sensor)**
Range:...............................0 – 5,000 ppm
Resolution.............................1 ppm
Accuracy ................................± 30 ppm ± 5 %
Warming phase...................30 sec
Response time....................<30 sec

**CO-Measurement**
Range..................................0 – 1,000 ppm
Resolution.............................1 ppm
Accuracy ..............................± 10 ppm or less
                                        than 100 ppm
                                        ± 10 % between
                                        101-500 ppm
                                        ± 20 % more than 501 ppm
Response time.....................<60 sec.

**Temperature**
Range..................................-5 °F...140 °F
Resolution.............................0.1 % r.H.
Accuracy ..............................± 0.9 °F

**Relative air humidity**
Range .................................0.1...99.9 % r.H.
Resolution.............................0,1 % r.H.
Accuracy..............................± 3 % at 10 to 90 % r.H.
                                        and 77 °F,
                                        ± 5 % r.H. at other readings
                                        and 77 °F
Response time.....................<10 sec

**Operating temp.** ...............32 °F... 112 °F

**Storage temp.** ..................23 °F... 140 °F,
                                        10-90 % r.H.
                                        non-condensing

**Current supply**..................4 AA-batteries or
                                        mains operation via a
                                        9 V-DC-adapter (not included in delivery)
**PC** ...................................USB-interface
**Memory** ...........................6,000 records
**Logrates** ..........................1s...4h49m59s
**Size** ..................................8.2" x 2.8" x 2.2"
**Weight** .............................0.5 lbs



**Wohler KM 410 IAQ Instrument**
**$CO_2$, CO, humidity and temperature**

Wohler KM 410 IAQ Instrument

4 AA-batteries

USB data cable

PC software

manual

plastic case

**Part no. 4280**

# Wohler FA 410 Fan Anemometer NEW

## TECHNICAL DATA

**Range**
Flow velocity........................39.3...5,906 fpm
Volume flow ........................0 – 58.000 cfm
Temperature........................-4...140 °F

**Resolution**
Flow velocity ......................20 fpm
Volume flow ........................0...99,999 cfm
Temperature........................0.1 °F

**Accuracy**
Flow velocity.......................± (1.5 % of reading + 0.3 m/s)
for under 20 m/sec,
± (3 % of reading +0.3 m/sec)
for above 20 m/sec
Temperature........................± 33.08 °F

**Operating conditions**
**(to avoid condensation)** ....32 – 122 °F, < 90 % RH

**Storage conditions** ...........14 – 122 °F, < 90 % RH

**Power suppl**y .....................4 micro batteries AAA

**Dimensions** ......................10.6" x 4.2" x 2"

**Fan diameter**.....................4"

**Weight (without funnel)** ....0.6 lbs

## APPLICATION
- Measurement of air speed, temperature and humidity at the air vents
- Detection of air leaks
- Integrated measurement of volume flow
- Direct measurement of volume flow at air vents in combination with the cone

## ADVANTAGES
- Easy handling with automatic identification of the cone
- Measurement report via IR-transfer to the Wohler TD 100 Thermal Fast Printer
- Hold-Function
- Selectable units: m/sec, fpm, m³/h, CFM, °C, °F, cm², Inch²
- Wohler Telescope Handle e.g. for ceiling vents
- Parallel measurement of volume flow, air velocity and air temperature
- Backlight LC display

### Wohler FA 410 Fan Anemometer

Wohler FA 410 Fan Anemometer

4 x AAA batteries

plastic carrying case

**Part no. 4146**

### Wohler FA 410 Fan Anemometer Set with Wohler FA 4xx Measuring Funnel Set

Wohler FA 410 Fan Anemometer

4 x AAA batteries

plastic case

Wohler FA 4xx measuring Funnel Set with rectangular and round measuring funnel in a handy carrying bag; funnels can be clipped onto the fan anemometer
rectangular funnel: 1 x 1 ft
round funnel: 0.7 ft diameter

**Part no. 4155**

# Wohler FA 430 Fan Anemometer NEW

## APPLICATION
- Measurement of air velocity, temperature, humidity, CO$_2$ at the air vents
- Integrated measurement of flow rate
- Direct measurement of flow rate at the air nozzle in combination with a funnel
- Determination of the inlet and exhaust air quality

## ADVANTAGES
- Two measurements in one step: determination of flow rate and evaluation of the inlet and exhaust air quality via CO$_2$, T, RH
- Easy handling with automatic identification of the cone
- Measurement report via IR-transfer to the Wohler TD 100 Thermal Fast Printer
- Wohler Telescope Handle e.g. for ceiling vents
- Selectable units: m/sec, fpm, m³/h, CFM, °C, °F, cm², Inch², ppm, %, RH, WBT, DP
- Determination of the dew point and wet bulb temperature
- Hold-Function
- Min- / Max-Function
- Backlight LC display
- Simultaneous measurement of wet bulb temperature and dew point

## TECHNICAL DATA

**Range**
Flow velocity........................39.3 – 5,906 fpm
Volume flow ........................0 – 58.000 cfm
Temperature........................-4 °F – 140 °F
Relative humidity .................0.1% – 99.9%
Dew point ...........................-4 °F – 139.82 °F
Wet-bulb temperature..........-4 °F – 139.82 °F
CO$_2$.....................................0 – 9,999 ppm

**Resolution**
Flow velocity......................20 fpm
Volume flow .......................0.1 99,999 cfm
Temperature.......................0.1 °F
Relative humidity (RH) ........0.1 %
Dew point ..........................0.1°F
Wet-bulb temperature .........0.1°F
CO$_2$....................................1 ppm

**Accuracy**
Flow velocity.......................±(1.5 % of reading +
0.3 m/s) for under 20 m/s,
±(3 % of reading + 0.3 m/s) for above 20 m/s
Temperature.......................33.08 °F
Relative humidity ................± 3 % (at 77 °F),
otherwise ± 5 %
CO$_2$....................................± 30 ppm ±5 % of reading (0 – 5,000 ppm)

**CO$_2$ warm-up time**.............30 seconds

**Operating conditions**
**(to avoid condensation)** ....32 – 122 °F, < 80 % RH

**Storage conditions** ...........14 °F – 122 °F, < 90 % RH

**Power Supply**...................4 micro batteries AAA

**Dimensions** ......................10.6" x 4.2" x 2"

**Fan diameter**....................4"

**Weight (without funnel)** ....0.6 lbs

### Wohler FA 430 Fan Anemometer incl. CO$_2$-Measurement

Wohler FA 430 Fan Anemometer

4 x AAA batteries

plastic carrying case

**Part no. 4147**

### Wohler FA 430 Fan Anemometer Set with Wohler FA 4xx Measuring Funnel Set

Wohler FA 430 Fan Anemometer

4 x AAA batteries

plastic case

Wohler FA 4xx Measuring Funnel Set with rectangular and round measuring funnel in a handy carrying bag; funnels can be clipped onto the fan anemometer
rectangular funnel: 1 x 1 ft
round funnel: 0.7 ft diameter

**Part no. 4156**

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|---|---|---|---|---|---|---|---|---|
| **APPLICATIONS** | | | | | | | | |
| Dry environments – e.g. Flue Gas Systems.: 5" dia or larger | | ● (1) | ● | | ● (1) | ● | ● | ● (1) |
| 4" dia to 5" dia | ● | ● | ● | ● | ● | ● | ● | ● (1) |
| 3" dia to 4" dia | ● | ● | ● | ● | ● | ● (2) | | ● (1) |
| 1.5" dia to 3" dia | ● | | ● | ● | | | | ● (1) |
| Wet environments – e.g. Waste Water Pipes: 5" dia or larger | | ● (4) | ● | | ● (4) | ● (3) | ● | |
| 3" dia to 5" dia | ● (4,5) | ● (4) | ● | | ● (4) | ● (2, 3) | ● | |
| 1.5" dia to 3" dia | ● (4,5) | | ● | ● (4, 5) | | | | |
| Twin walls, cavaties, ducts | | ● | ● | | ● | ● | ● | |
| **FEATURES** | | | | | | | | |
| Video Memory | 2 GB SD-Card (VIS 250) | 2 GB SD-Card (VIS 350) | 2 GB SD-Card | | | | | |
| DM = Digital Meter Counter (Increments of 0.10 ft) | DM | DM | DM with Camera Viper or Cable Reel | | | | DM | DM |
| Video Output | RCA | RCA | RCA | | | | | |
| Built-in sonde for location (8.9 kHz) | with Wohler L 200 Locator | with Wohler L 200 Locator | | with Wohler L 200 Locator | with Wohler L 200 Locator | | | |
| Audio recording | | | ● | | | | | |
| **TECHNICAL DATA** | | | | | | | | |
| Monitor: Display | 7" TFT | 7" TFT | 7" TFT | | | | | |
| Battery Voltage & Technology / Main Supply | 1 x 12 V NiMH battery (Space to store 2 rechargeable NiMH batteries) / Main Supply | 2 x 12 V NiMH batteries / Main Supply | 1 x 12 V NiMH battery / Main Supply | | | | | |
| Operation Time with batteries | 1 x 120 min = approx. 2 h | 2 x 120 min = approx. 4 h | approx. 2 h | | | | | |
| Camera Head: Dimensions | 1" x 1.5" | Ø 1.5" x 2.4" | | 1" x 1.5" | 1.5" x 2.4" | 2" x 4" | | |
| Pan- and tilt range | | 360° / 180° | | | 360° / 180° | 360° / 180° | | |
| Protection class | IP 68 (5) | IP 67 | | IP 68 (5) | IP 67 | IP 64 | | |
| Field of View (FOV) | 120° | 120° | | 120° | 120° | 98° x 75° | | |
| Lighting | 12 x LED white | 12 x LED white | | 12 x LED white | 12 x LED white | 4 x bulbs, 6 x LED white | | |
| Cable / Push Rod: Length / Diameter | 100 ft, 0.25" dia | 100 ft, 0.25" dia | | | | | 100 ft, 0.27" | 100 ft, 0.2" |
| Total Dimensions | 20" x 17" x 7" | 20" x 17" x 7" | 8" x 8" x 1.6" (without bag) | 1" x 1.5" | 1.5" x 2.4" | 2" x 4" | 16" x 4" | 14" x 4" |
| Weight | 18 lbs | 18 lbs | 2.6 lbs (without bag) | 0.13 lbs | 0.25 lbs | 0.53 lbs | 7 to 8 lbs | 6 to 8 lbs |

(1) top down and bottom top inspection (2) limited use in bends (3) with roller guide, see accessories; splash water proof only (4) recommended for wet applications; (5) waterproof up to 6.5 ft of water

# CLEAR VIEW, WHEN SPACE IS TIGHT NEW

## Wohler VIS 200 / 250 – Visual inspection, distance measurement and built-in sonde

Wohler's innovative VIS 200/250 Visual Inspection System enables you to easily view damage in pipes of 1 1/2" dia and larger – no power outlet required. Compact by design and powered by a rechargeable battery, this complete camera-system is contained in a robust plastic case. The camera head features a powerful, integrated light to allow you to clearly view damage in waste water pipes (at least 1 1/2" dia) and inspect downpipes as well as flue gas lines. Absolutely essential for locating obstructions or damage quickly!
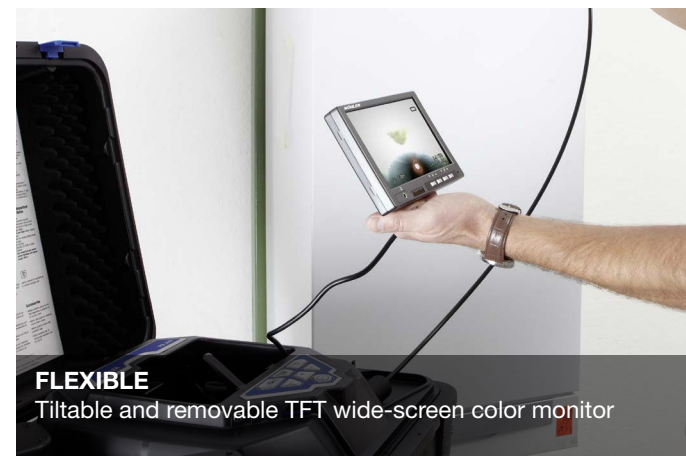


**ROBUST HOUSING** | **1" diameter MINIATURE COLOR CAMERAHEAD** | **87°** | **VIDEO FUNCTION** | **PHOTO FUNCTION** | **INTEGRATED LOCATOR TRANSMITTER** | **POWERFUL RECHARGEABLE BATTERY UP TO 4h MOBILITY**

## WIDE RANGE OF APPLICATIONS

Locate damage and inspect:
- Waste water pipes of 1 1/2" dia and larger
- Ventilation lines of 1 1/2" dia and larger
- Inspect hollow spaces, e.g. in front-wall installations
- Flue gas lines up to approx. 6" dia

## FUNCTIONALITY

- Waterproof, light-sensitive camera head with a diameter of just 1" easily takes bends in stride
- Store video footage on a 2 GB SD card (Wohler VIS 250)
- Digital Indication of the camera head angle (Wohler VIS 250)
- Electronic distance measurement displayed on monitor
- Fully equipped mobile solution in a robust, plastic case
- Does not require main power supply
- Bright TFT color monitor for razor-sharp images
- Tiltable and removable monitor with 6' cable
- Integrated video output for documentation purposes
- Battery operating time: 120 min. (second rechargeable battery optional)
- Transmitter (8.9 kHz) integrated into camera head for locating
- Data exchange via mini USB cable (Wohler VIS 250)

## LOCATOR (OPTIONAL)

- Transmitter integrated in camera head makes it possible to precisely locate the camera head
- Facilitates targeted repairs to damaged pipelines
- Telescopic holder makes it possible to locate damage under floors or in ceilings
- Chalk holder with lithographic chalk makes it easy to mark located damage immediately
- Powerful rechargeable battery

## DOCUMENTATION

Simply record and store photos and videos on a 2 GB SD card (Wohler VIS 250) for documentation and archiving purposes for you and your customers



## TECHNICAL DATA

**Monitor**
Dimensions housing.............7" x 4.5" x 1.3"
TFT-display .........................7" / 16:9 format
Video out ...........................FBAS signal
Weight................................1 lbs

**Power Supply**
Power supply.......................Space for 2 rechargeable batteries, each 12 V or via power pack
Battery operating time..........Max. 2 rechargeable batteries, each 120 mins. = 4 h (battery status in display)

**Miniature color camera head, 1" diameter**
Type ..................................1/3" COLOR CMOS
Resolution...........................420 lines
Pixels.................................768 x 576 (PAL), 656 x 492 (NTSC)
Light sensitivity...................0.5 Lux
Lens ..................................f = 0.09", F = 2.5
Viewing angle......................115°
Light source ........................12 white LEDs
Degree of protection ............Waterproof to IP 68
Dimensions.........................1" dia x 1.5" long
Weight................................0.5 lbs
Operation temperature..........32...104 °F, RH 95 % MAX
Storage temperature.............-4...122 °F, RH 95 % MAX
Transmitter frequency ..........8.9 kHz

**Push rod**
Length ...............................100 ft.
Diameter.............................0.24"
Distance measurement .........digital distance meter

**Plastic case**
Dimensions.........................20" x 17" x 7" (l x w x h)
Weight................................15 lbs

**Locator receiver**
Display................................Graphic visualization of transmitted position

**Output impedance**
Headphones........................32 Ohm
Power supply.......................12 V NiMH battery (rechargeable)
Operating temperature..........32...104 °F
Storage temperature.............14...104 °F
Weight................................1.3 lbs
Dimensions.........................13" x 6" x 3" (l x w x h)

**Memory (Wohler VIS 250)**
Recording ...........................2 GB SD card (2.5 h recording capacity)
Interface ............................Mini USB port

## PRODUCT FEATURES

| | Flues, ventilation lines, waste water pipes | |
|---|---|---|
| **Wohler VIS** | 200 | 250 |
| **Features** | | |
| Color camera head 1" dia | ● | ● |
| Digital distance counter | ● | ● |
| Photo and video record | | ● |
| Menu | | ● |
| Video settings | | ● |
| Transmitter / Sonde | ● | ● |
| Angle and gravity indicator | | ● |



**FLEXIBLE**
Tiltable and removable TFT wide-screen color monitor



**WATERPROOF AND ROBUST**
The camera head easily negotiates 87°-bends in pipes of 1 1/2" dia and larger

WÖHLER   WÖHLER

VISUAL INSPECTION

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

MEASURING INSTRUMENTS LEAKAGE AND PRESSURE

MEASURING INSTRUMENTS IAQ/BUILDING

VISUAL INSPECTION

SWEEP INSTRUMENTS

VISUAL INSPECTION | WOHLER VIS 200 VISUAL INSPECTION SYSTEM

VISUAL INSPECTION | WOHLER 250 VISUAL INSPECTION SYSTEM

MEASURING INSTRUMENTS
FLUE GAS ANALYSIS

MEASURING INSTRUMENTS
LEAKAGE AND PRESSURE

MEASURING INSTRUMENTS
IAQ/BUILDING

VISUAL INSPECTION

VISUAL INSPECTION

SWEEP INSTRUMENTS

# Wohler VIS 200 Visual Inspection System  NEW

# Wohler VIS 250 Visual Inspection System  NEW

1" diameter
MINIATURE COLOR CAMERAHEAD

87°

INTEGRATED LOCATOR TRANSMITTER

POWERFUL RECHARGEABLE BATTERY UP TO 4h MOBILITY

1" diameter
MINIATURE COLOR CAMERAHEAD

87°

VIDEO FUNCTION

PHOTO FUNCTION

INTEGRATED LOCATOR TRANSMITTER

POWERFUL RECHARGEABLE BATTERY UP TO 4h MOBILITY

! *The color camera head 1" diameter can be located with the Wohler L 200 Locator– more information see page 85*

! *The color camera head 1" diameter can be located with the Wohler L 200 Locator – more information see page 85*

### Wohler VIS 200 Visual Inspection System 100 ft NTSC Set

Visual inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 200 NTSC Visual Inspection System with digital meter counter

miniature color camera head 1" dia, V2 NTSC

7" TFT color monitor

6 ft connection cable (removable monitor)

100 ft push rod 0.24" diameter

1 anti- slide mat

1 NiMH batterie with charger

1 guidance sleeve for mini camera head

1 guidance ball for flex part of camera push rod

heavy duty carrying case

➜ **Accessories on page 66**

**Part no. 6261**

### Wohler VIS 200 Visual Inspection System with Wohler L 200 Locator

Visual inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 200 NTSC Visual Inspection System with digital meter counter

miniature color camera head 1" dia, V2 NTSC

7" TFT color monitor

6 ft. connection cable (removable monitor)

100 ft. push rod 0.24" diameter

anti-slide mat

1 NiMH battery with charger

1 guidance sleeve for mini camera head

1 guidance ball for flex part of camera push rod

Wohler L 200 Locator (Receiver)

heavy duty carrying case

➜ **Accessories on page 66**

**Part no. 8937**

### Wohler VIS 250 Visual Inspection System 100 ft NTSC Set

Visual inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 250 NTSC Visual Inspection System with digital meter counter

miniature color camera head 1" dia, V2 NTSC

2 GB SD card and mini USB cable

7" TFT color monitor

6 ft. connection cable (removable monitor)

100 ft. push rod 0.24" diameter

1 anti-slide mat

1 NiMH battery with charger

1 guidance sleeve for mini camera head

1 guidance ball for flex part of camera push rod

heavy duty carrying case

➜ **Accessories on page 66**

**Part no. 6253**

### Wohler VIS 250 Visual Inspection System with Wohler L 200 Locator

Visual inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 250 NTSC Visual Inspection System with digital meter counter

miniature color camera head 1" dia, V2 NTSC

2 GB SD card and mini USB cable

7" TFT color monitor

6 ft. connection cable (removable monitor)

100 ft. push rod 0.24" diameter

anti-slide mat

1 NiMH battery with charger

1 guidance sleeve for mini camera head

1 guidance ball for flex part of camera push rod

Wohler L 200 Locator (Receiver)

heavy duty carrying case

➜ **Accessories on page 66**

**Part no. 8932**

| VIS Guidance Sets, Glare Protection, Lighting | Part no. |
| --- | --- |
| **Wohler VIS Guidance Set 70**<br>for 1" camera head<br>guidance sleeve with protection cage and centering star | 3883 |
| **Wohler VIS Centering Star**<br>for Wohler VIS 2xx / 3xx<br>8" diameter with 6 brushes, with thread, centers the GRP camera rod,  to guide the camera head | 3854 |
| **Wohler VIS Centering Brush Extension**<br>8" diameter with inner and outer thread for endless extension | 3853 |
| **Wohler VIS Centering Brush**<br>for Wohler VIS 400 / VIS 2xx / VIS 3xx | 3850 |
| **Wohler VIS Spare brushes**<br>24 pieces<br>for centering brush | 3858 |
| **Wohler VIS Stabilization Tube**<br>for Wohler VIS 400 / 2xx / 3xx<br>extension for camera guidance system, 1.4" x 3.0" dia POM black | 21736 |
| **Wohler Guidance Sleeve**<br>for 1" camera head | 3827 |
| **Wohler Guidance Sleeve**<br>with protection cage<br>for 1" camera head | 3847 |
| **Wohler Camera Roller Guide**<br>for pan and tiltable camera head 1.5" | 3681 |
| **Sunshade for Wohler VIS 2xx and VIS 3xx**<br>for 7" TFT monitor | 6814 |

| Camera Guidance | Part no. |
| --- | --- |
| **Wohler Guidance Ball**<br>for flex part of camera push rod | 3634 |
| **Relining Adapter for VIS 3xx** | 6888 |
| **Re-lining adapter set**<br>consisting of:<br>re-lining adapter, centering star and 3 x stabilization sleeve | 6889 |

| Power Supply | Part no. |
| --- | --- |
| **Power Supply**<br>for Wohler VIS 3xx / VIS 2xx<br>18V, 1.5A, 100-240V, 50 Hz, charge time 3 hours, for all countries | 3789 |
| **Wohler Battery 12 V NiMh 2600 mAh**<br>VIS 2xx / VIS 3xx<br>operation time: 120 min<br>warranty: 12 months | 4715 |
| **Car Charger**<br>Wohler VIS 2xx / 3xx, 18V | 3169 |

| Accessories / Further products | Part no. |
| --- | --- |
| **Wohler L 200 Locator (Receiver)**<br>Wohler L 200 Locator Receiver, plastic case, USB power supply with micro USB cable, grease crayon (12 pcs. box, yellow), telescopic rod and headphones | 7430 |
| **Wohler VIS Cleaning Set** NEW<br>34 oz disinfection spray, 50 cleaning tissues, 100 disposable gloves size XL (powder free), 7 oz lubricant, plastic case; for approx. 50 applications. | 4725 |
| **Wohler VIS Cleaning Set Refill** NEW<br>34 oz disinfection spray, 50 cleaning tissues, 100 disposable gloves size XL (powder free), 7 oz lubricant, in plastic bag, for approx. 50 applications. | 4726 |

# UNIQUELY CLEAR VIEW `NEW`

## Unique pan & tilt camera head, position indicator, home function and sonde with the Wohler VIS 350

Visual inspection in a case: With the new Wohler VIS 350 camera system, you not only have everything you need to inspect waste water pipes, flue gas, ventilation lines and industrial piping – you can also precisely locate the damage and accurately document the results of the inspection.

**180°**

**360°**
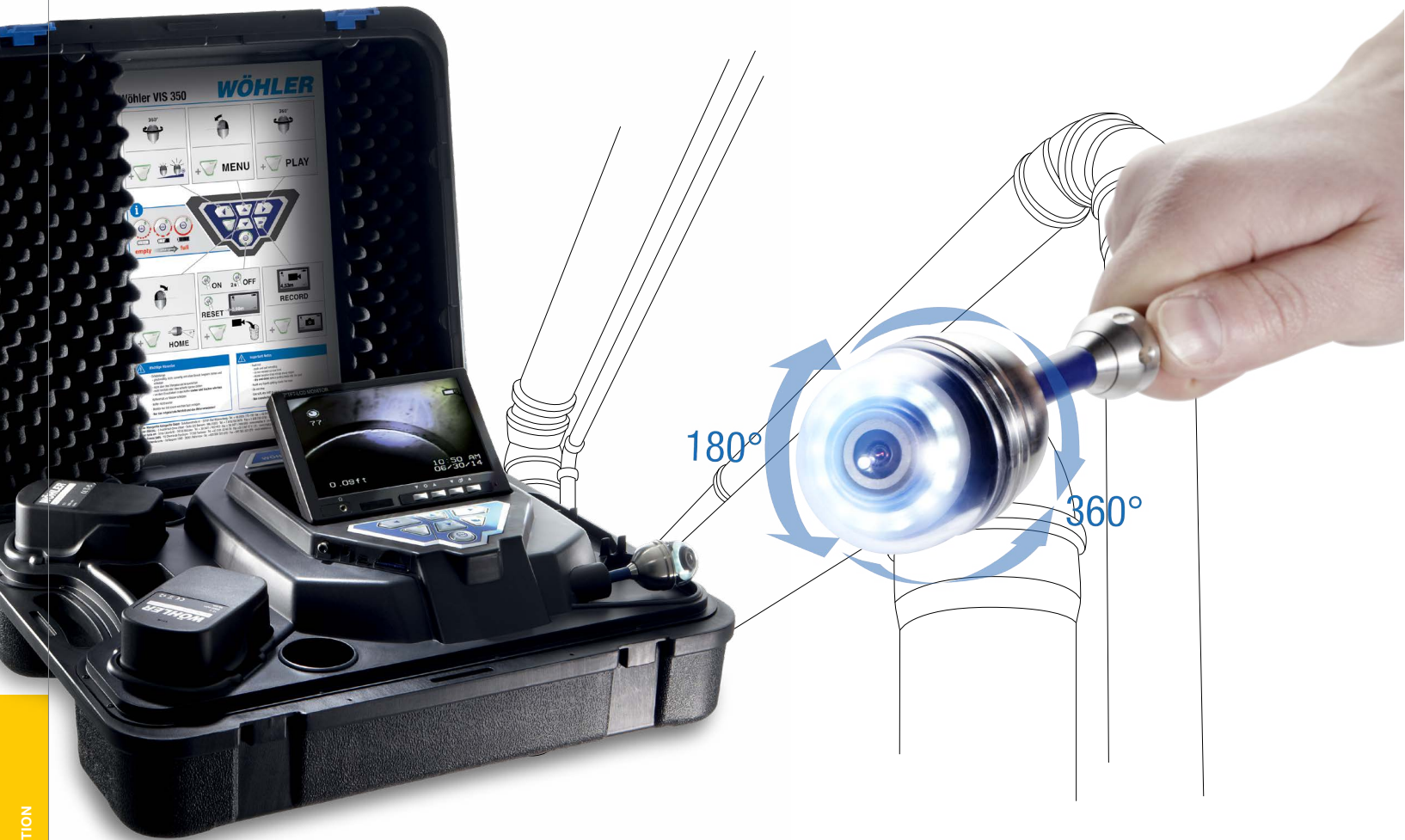
**HOME-FUNCTION**
The Home button (Wohler VIS 350) realigns the camera head to its initial position.

**BUILT-IN SONDE FOR LOCATING**
The camera head is equipped with a transmitter – that means the camera head can easily be located with the new Wohler L 200 Locator.

**BRIGHT ILLUMINATION**
Thanks to the excellent lighting system of the color camera head, the camera supplies razor sharp images of even the darkest corners of the section under inspection.

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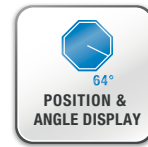
**ROBUST HOUSING** | **64° POSITION & ANGLE DISPLAY** | **1 1/2" DIA PAN & TILT COLOR CAMERA HEAD** | **VIDEO FUNCTION** | **PHOTO FUNCTION** | **INTEGRATED LOCATOR TRANSMITTER** | **POWERFUL RECHARGEABLE BATTERY UP TO 4h MOBILITY**

## WIDE RANGE OF APPLICATIONS

Locate damage and inspect:
- Waste water lines of 2" dia and larger
- House connections up to 8" dia
- Flue gas systems of 2" dia and larger
- Ventilation lines of ventilation systems
- False ceilings, hollow spaces, shafts

## FUNCTIONALITY

- Optics pan 360° and tilt 180° providing maximum movement radius and insures even the smallest damage is not hidden from your view
- Store video footage and photos on a 2 GB SD card (Wohler VIS 350)
- Camera head with integrated transmitter facilitates camera head location detection with the Wohler L 200 Locator
- Digital position and angle of the camera head displayed on the monitor
- Home function aligns the camera head to a straight position – display parallel to the ground above
- Brightly illuminating color camera head, 2" in length and 1 1/2" in diameter, easily negotiates tight bends
- Electronic meter counter in increments of 0.10 ft. displayed on the monitor
- Bright TFT color monitor (tiltable and removable) supplies razor sharp images
- Battery operating time: 2 x 120 min. with 2 rechargeable batteries included
- Fully equipped mobile solution in a robust plastic case

## LOCATOR (OPTIONAL)

- Transmitter integrated in camera head makes it possible to precisely locate the camera head
- Facilitates targeted repairs to damaged pipelines
- Telescopic holder makes it possible to locate damage under floors or in ceilings
- Chalk holder with lithographic chalk ensures it is possible to mark located damage immediately
- Long-lasting LI-ION rechargeable battery

## DOCUMENTATION

Simply record and store photos and videos on a 2 GB SD card (Wohler VIS 350) for documentation and archiving purposes for you and your customers.

## TECHNICAL DATA

**Monitor**
Dimensions housing.............7" x 4.5" x 1.3"
TFT-Display.........................7" / 16:9 format
Video-Out...........................FBAS signal
Weight................................1 lbs

**Power Supply**
Power supply.......................Space for 2 rechargeable batteries, each 12 V or via power supply
Battery operating time..........Max. 2 rechargeable batteries, each 120 mins. = 4 h (battery status in display)

**Pan & tilt 1.5" dia color camera head**
Type ...................................1/3" COLOR CMOS
Pixels..................................656 x 492 (NTSC)
Light sensitivity...................0.5 Lux
Lens ...................................f = 0.09", F = 2.5
Viewing angle......................115°
Light source ........................12 white LEDs
Degree of protection ............Waterproof to IP 67
Dimensions.........................1 1/2" dia x 2"
Operating temperature..........32...104 °F, RH 95 % MAX
Storage temperature.............-4...122 °F, RH 95 % MAX

**Locator transmitter**
Transmission frequency ........8.9 kHz

**Push rod**
Length ................................100 ft.
Diameter .............................0.33"

**Plastic case**
Dimensions.........................20" x 17" x 7" (l x w x h)
Weight................................18 lbs

**Distance measurement**
Wohler VIS 350 / VIS 300......Electronic meter counter

**Locator receiver**
Display................................Graphic visualization of transmitted position

**Output impedance**
Headphones.........................32 Ohm
Power supply.......................12 V MiMH battery (rechargeable)
Operating temperature..........32...104 °F
Storage temperature ............14 °F...104 °F
Weight................................1.3 lbs
Dimensions.........................13" x 6" x 3" cm (l x w x h)

**Memory (Wohler VIS 350)**
Recording ...........................2 GB SD card (2.5 h recording capacity)
Interface .............................Mini USB port

## PRODUCT FEATURES

| | Chimneys, vents and waste water pipes | |
|---|---|---|
| **Wohler VIS** | **350** | **350**PLUS |
| **Features** | | |
| Pan and tilt color camera head 1.5" dia | ● | ● |
| Detachable 1" dia camera head | | ● |
| Digital distance measurement | ● | ● |
| Photo & video record | ● | ● |
| Menu / Video settings | ● | ● |
| Transmitter / Sonde | ● | ● |
| Angle and gravity indicator | ● | ● |
| Home-function | ● | ● |

MEASURING INSTRUMENTS FLUE GAS ANALYSIS
MEASURING INSTRUMENTS LEAKAGE AND PRESSURE
MEASURING INSTRUMENTS IAQ/BUILDING
VISUAL INSPECTION
SWEEP INSTRUMENTS
VISUAL INSPECTION

VISUAL INSPECTION | WOHLER VIS 350 VISUAL INSPECTION SYSTEM

VISUAL INSPECTION | WOHLER VIS 350PLUS VISUAL INSPECTION SYSTEM

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

MEASURING INSTRUMENTS LEAKAGE AND PRESSURE

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SWEEP INSTRUMENTS

# Wohler VIS 350 VISUAL INSPECTION SYSTEM  NEW

**Wohler VIS 350 Visual Inspection System 100 ft NTSC**

Viusal inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 350 NTSC Visual Inspection System with attached 1.5" color pan & tilt camera head

video and still picture recording function

pan and tilt color camera head 1.5" dia, V2 NTSC

2 GB SD card

mini USB cable

7" TFT color monitor

6 ft. connection cable (removable monitor)

100 ft. push rod (0.26" dia)

5 plastic domes

1 anti-slide mat

2 NiMH batteries with charger

heavy duty carrying case

➜ **Accessories on page 72**

Part no. 7354

**Wohler VIS 350 Visual Inspection System 100 ft push rod & detachable camera head**

Visual inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 350 NTSC Visual Inspection System with detachable 1.5" color pan & tilt camera head

video and still picture recording function

detachable pan and tilt color camera head 1.5" dia, V2 NTSC

2 GB SD card

mini USB cable

7" TFT color monitor

6 ft. connection cable (removable monitor)

100 ft. push rod  (0.26" dia)

5 plastic domes

1 anti-slide mat

2 NiMH batteries with charger

heavy duty carrying case

➜ **Accessories on page 72**

Part no. 6352

# Wohler VIS 350PLUS VISUAL INSPECTION SYSTEM  NEW

**!**
- detachable 1.5" pan & tilt color camera head
- detachable 1" miniature color camera head

**Wohler VIS 350Plus Visual Inspection System with 1.5" color pan & tilt camera head and 1" color camera head**

Visual inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 350 NTSC Visual Inspection System with two camera heads

video and still picture recording function

detachable pan and tilt color camera head 1.5" dia, V2 NTSC

detachable miniature color camera head 1" dia incl. guidance sleeve

guidance ball for push rod

2 GB SD card and mini USB cable

7" TFT color monitor

6 ft. connection cable (removable monitor)

100 ft push rod  0.26" dia

5 plastic domes

1 anti-slide mat

2 NiMH batteries with charger

heavy duty carrying case

➜ **Accessories on page 72**

Part no. 8927

**Wohler VIS 350Plus Visual Inspection System with 1.5" color pan & tilt camera head and 1" color camera head and Wohler L 200 Locator**

Visual inspection for sewer and water pipes, drain and flue lines, ductwork, etc.

Wohler VIS 350 NTSC Visual Inspection System with two camera heads and  Wohler L 200 locator

video and still picture recording function

detachable pan and tilt color camera head 1.5" dia, V2 NTSC

detachable miniature color camera head 1" dia, incl. guidance sleeve

guidance ball for push rod

2 GB SD card and mini USB cable

7" TFT color monitor

6 ft. connection cable (removable monitor)

100 ft push rod  0.26" dia

5 plastic domes

1 anti-slide mat

2 NiMH batteries with charger

Wohler L 200 Locator

heavy duty carrying case

➜ **Accessories on page 72**

Part no. 8931

| VIS Guidance Sets | Part no. |
|---|---|
| **Wohler Guidance Set 100 for VIS 3xx**<br>pan and tilt camera head 1 1/2" dia<br>protection sleeve with cut-out, roller guide and centering star | 4240 |
| **Wohler Camera Roller Guide**<br>for pan and tiltable camera head 1.5" | 3681 |
| **Wohler VIS Centering Brush**<br>for Wohler VIS 400 / VIS 2xx / VIS 3xx | 3850 |
| **Wohler VIS Centering Star**<br>for Wohler VIS 2xx / 3xx<br>8" diameter with 6 brushes, with thread, centers the GRP camera rod,  to guide the camera head | 3854 |
| **Wohler VIS Centering Brush Extension**<br>8" diameter with inner and outer thread for endless extension | 3853 |
| **Wohler VIS Spare brushes**<br>24 pieces<br>for centering brush | 3858 |
| **Wohler VIS Stabilization Tube**<br>for Wohler VIS 400 / 2xx / 3xx<br>extension for camera guidance system, 1.4" x 3.0" dia POM black | 21736 |
| **Wohler Guidance Ball**<br>for flex part of camera push rod | 3634 |

| Power Supply | Part no. |
|---|---|
| **Power Supply**<br>for Wohler VIS 3xx / VIS 2xx<br>18V, 1.5A, 100-240V, 50 Hz, charge time 3 hours, for all countries | 3789 |
| **Wohler Battery 12 V NiMh 2600 mAh**<br>VIS 2xx / VIS 3xx<br>operation time: 120 min<br>warranty: 12 months | 4715 |
| **Car Charger**<br>Wohler VIS 2xx / 3xx, 18V | 3169 |

| Accessories | Part no. |
|---|---|
| **Relining Adapter for VIS 3xx** | 6888 |
| **Re-lining adapter set**<br>consisting of:<br>re-lining adapter, centering star and 3 stabilization sleeves | 6889 |
| **Wohler Protection Sleeve**<br> with cutout<br> for camera head 1.5" dia | 2641 |
| **Wohler Protection Sleeve**<br>for camera head 1.5" dia | 3682 |
| **Wohler Glass Dome**<br>for pan and tilt camera head 1.5" dia | 3674 |
| **Wohler Replacement Polycarbonate Dome**<br>10 pcs.<br>for pan and tiltable camera head 1.5" dia | 3675 |
| **Anti slide mat for VIS 2xx / VIS 3xx** | 3252 |
| **Sunshade for Wohler VIS 2xx and VIS 3xx**<br>for 7" TFT monitor | 6814 |

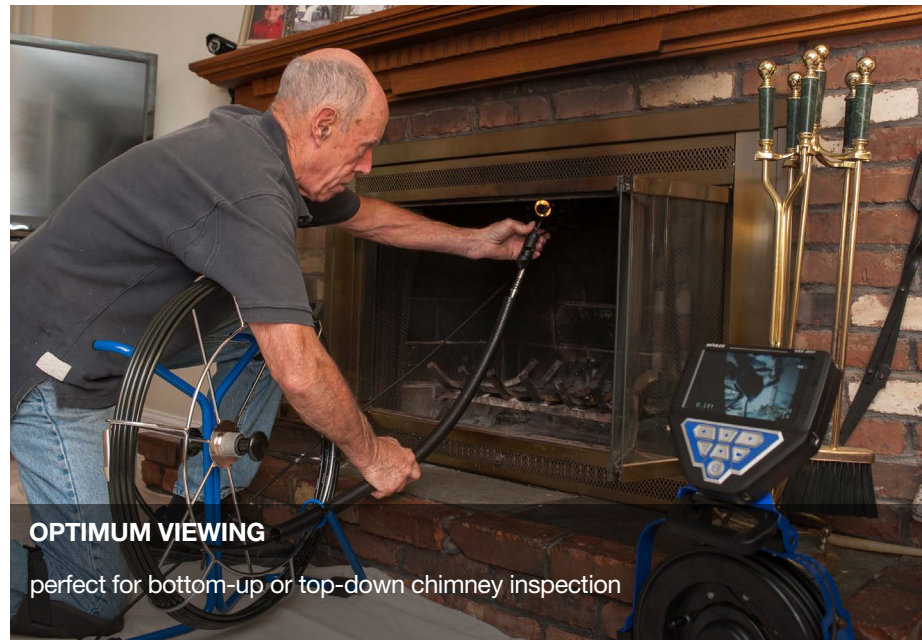| Accessories / Further products | Part no. |
|---|---|
| **Wohler L 200 Locator (Receiver)**<br>Wohler L 200 Locator Receiver, plastic case, USB power supply with micro USB cable, grease crayon<br>(12 pcs. box, yellow), telescopic rod and headphones | 7430 |
| **Wohler VIS Cleaning Set** `NEW`<br>34 oz disinfection spray, 50 cleaning tissues, 100 disposable gloves size XL (powder free), 7 oz lubricant,<br>plastic case; for approx. 50 applications. | 4725 |
| **Wohler VIS Cleaning Set Refill** `NEW`<br>34 oz disinfection spray, 50 cleaning tissues, 100 disposable gloves size XL (powder free), 7 oz lubricant,<br>plastic bag, for approx. 50 applications. | 4726 |

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

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VISUAL INSPECTION

# MODULAR POINT OF VIEW **NEW**

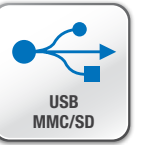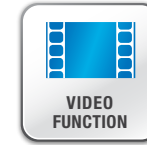## Wohler VIS 400 Modular Visual Inspection System

The carry strap around your neck and the monitor in front of your chest, one hand guides the camera cable, the other controls the camera head via the familiar Wohler keypad: That is how stable the new Wohler VIS 400 video inspection system is and how easy it is to work with while inspecting chimneys or inspecting house supply lines.
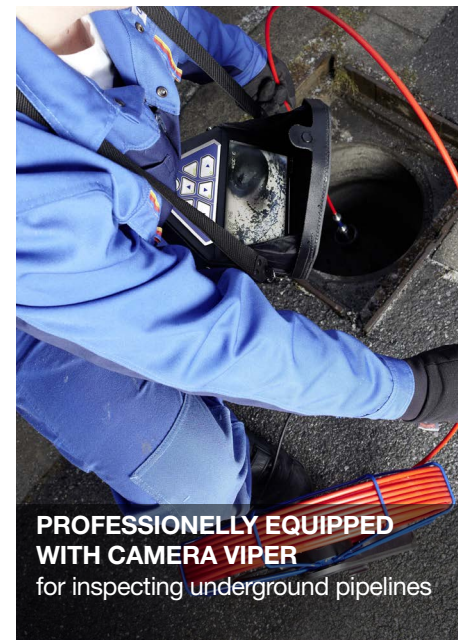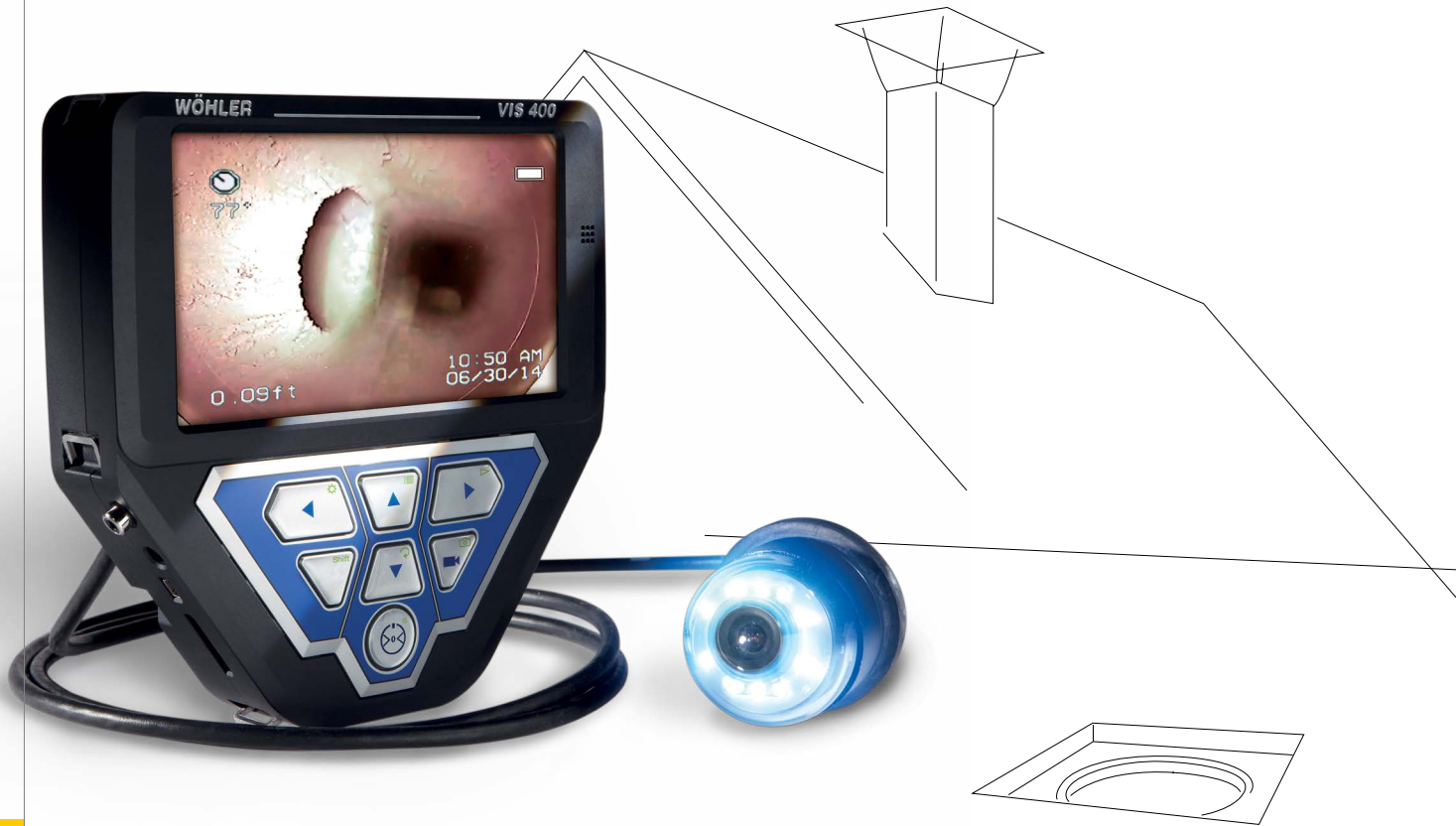
**ROBUST HOUSING**

**VIDEO FUNCTION**

**PHOTO FUNCTION**

**VOICE RECORDING**

**USB MMC/SD**

### WIDE RANGE OF APPLICATIONS

Analyze damage and visually inspect:
- Flue gas systems, chimneys
- Building drains, house connections
- Ventilation systems

### PRODUCT BENEFITS

- Modular system – components are modular by design to support extensive expansion options
- Pan & Tilt color camera heads with integrated power lighting easily negotiate bends in the line
- Voice recording allows you to document each inspection with verbal notes
- Mini USB port for data transfer

### DOCUMENTATION

Integrated video output  – simply record and store photos, videos and voice annotations on a 2 GB SD card for documentation and archiving purposes for you and your customers.

**TECHNICAL DATA**

**Monitor**
| | |
|---|---|
| TFT display | 7" / 16:9 format |
| Video out | FBAS signal |
| Power supply | 12 V NiMH rechargeable battery, 2.000 mAh |
| Battery operating time | 2 h (battery status in display) |
| Distance measurement | Digital meter counter in conjunction with the camera viper and cable reel |
| Storage | 2 GB SD card (2.5 h recording capacity) |
| Interface | Mini USB port |
| Operating temperature | 32...104 °F |
| Storage temperature | -4...122 °F |
| Dimensions housing without pouch | 8" x 8" x 2" |
| Dimensions housing with pouch | 9" x 9" x 3" |
| Weight | Without pouch 3 lbs; with pouch 4 lbs |
| Connection, stand | Standard |

### MODULAR SYSTEM DESIGN

Put your camera system together to suit your requirements and wishes. Select your components from the list below and more:

2" dia color pan & tilt camera head

1 1/2" dia color pan & tilt camera head

1" dia waterproof color camera head for smaller pipe diameters

**CABLE REEL WITH SOFT VIDEO CABLE**

**VIPER REEL WITH A PUSH ROD**

**CAMERA HEADS**

**PROFESSIONELLY EQUIPPED WITH CAMERA VIPER**
for inspecting underground pipelines

**OPTIMUM VIEWING**
perfect for bottom-up or top-down chimney inspection

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# Wohler VIS 400 Visual Inspection System – Vertical Inspection Package NEW

**APPLICATION**
- Top down chimney inspection
- Vertical inspection of vents and flues

**ADVANTAGES**
- Compact - no unnecessary weight on the roof
- Additional LEDs - "high beam" setting
- 2" Color pan & tilt camera head
- Modular system
- Light weight – 3 lbs only
- Incl. carrying belt and protection bag

Part no. 4133

# Wohler VIS 400 Visual Inspection System – Chimney NEW

**APPLICATION**
- Bottom-up chimney inspection
- Inspection of vents and flues

**ADVANTAGES**
- 2" color pan & tilt camera head
- Additional LEDs - "high beam" setting
- Modular system
- Available with push rod or video cable
- Incl. carrying belt and protection bag
- On- screen digital distance measurement

Part no. 4152

Part no. 4153

**Wohler VIS 400 7" TFT monitor NTSC**

Wohler VIS 400 7" TFT color monitor NTSC

mini USB cable

2 GB SD card, charger, case

leather protection bag with sunshade and shoulder belts

➔ Accessories on page 79

Part no. 4106

**Wohler VIS 400 Visual Inspection System NTSC Standard Kit**

Wohler VIS 400 7" TFT color monitor NTSC with and pan and tilt camera head 2" dia

camera cable 100 ft

2 GB SD card

power supply

leather protection bag with sunshade and shoulder belts

plastic case

➔ Accessories on page 79

Part no. 4133

**Wohler VIS 400 Visual Inspection System Viper Kit**

Wohler VIS 400 7" TFT color monitor NTSC

pan and tilt color camera head 2" dia

stabilization sleeve for color camera head

2 GB SD card

camera roller guide with protection cage

camera viper with 100 ft push rod, 0.28" dia

leather protection bag with sunshade and shoulder belts

aluminium case XXL

➔ Accessories on page 79

Part no. 4152

**Wohler VIS 400 Visual Inspection System Reel Kit**

Wohler VIS 400 7" TFT color monitor NTSC

cable reel with integrated distance measurement (resolution 0.05 m, shown on screen

camera holder for bottom-up chimney inspection

2 GB SD card

pan and tilt color camera head 2" dia with camera holder

replacement glass dome for camera head

camera cable 100 ft with distance counter

leather protection bag with sunshade and shoulder belts

aluminium case XXL

➔ Accessories on page 79

Part no. 4153

# Wohler VIS 400 Video Inspection System – Cavities **NEW**

## APPLICATION
- Inspection of cavities or machines

## ADVANTAGES
- Incl. telescope with flex and stay
- gooseneck up to 11 ft

part no. 7783

part no. 7784

| Monitor | Part no. |
|---|---|
| **Wohler VIS 400 7" TFT monitor NTSC**<br>Wohler VIS 400 7" TFT monitor , protection bag with sunshade and shoulder belts, mini USB cable<br>2 GB SD card, charger, case | 4106 |

| Camera Heads | Part no. |
|---|---|
| **Wohler Camera Head 1 1/2" dia, V2**<br>NTSC, detachable<br>with leather bag | 8926 |
| **Wohler Camera Head 1" dia, V2**<br>NTSC, detachable<br>with leather bag | 8934 |
| **Wohler Camera Head 2" dia**<br>NTSC, detachable<br>with leather bag | 7853 |

| Domes for Camera Head 2" dia | Part no. |
|---|---|
| **Wohler Replacement Glass Dome**<br>for Wohler 2" pan & tilt camera head | 7802 |
| **Replacement Glass Dome**<br>with protection cage<br>for Wohler 2" pan & tilt camera head | 3494 |
| **Plastic domes for 2" camera head**<br>pack of 5 pieces | 7075 |

| Protection Sleeves & Domes for Camera Head 1 1/2"dia | Part no. |
|---|---|
| **Wohler Protection Sleeve**<br>with cutout<br>for camera head 1.5" dia | 2641 |
| **Wohler Protection Sleeve**<br>for camera head 1.5" dia | 3682 |
| **Wohler Glass Dome**<br>for pan and tilt camera head 1.5" dia | 3674 |
| **Wohler Replacement Polycarbonate Dome**<br>10 pcs.<br>for pan and tiltable camera head 1.5" dia | 3675 |

**Wohler VIS 400 Cavity Kit USA
with camera head 1" V2 NTSC**

Wohler VIS 400 color 7" TFT monitor NTSC

camera head 1" V2 NTSC

telescopic pole with gooseneck 3 - 5 ft

plastic case

➔ **Accessories on page 79**

**Part no. 7783**

**Wohler VIS 400 Cavity Kit USA
with 1 1/2" pan & tilt head V2 NTSC**

Wohler VIS 400 color 7" TFT monitor

pan & tilt camera head 1 1/2" V2 NTSC

telescopic pole with gooseneck 3 - 11 ft

plastic case

➔ **Accessories on page 79**

**Part no. 7784**

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| Camera Cable | Part no. |
|---|---|
| **Wohler VIS 400 Camera Cable**<br>with distance marking | |
| 32 ft, extension cable | 8636 |
| 65 ft | 9172 |
| 100 ft | 7812 |
| 165 ft, without distance marking | 7845 |

| Camera Rods | Part no. |
|---|---|
| **Wohler GRP Camera Rod (2x Wohler 8-pin plugs)** | |
| red rugged, 0.28" dia, 65 ft long | 7829 |
| red rugged, 0.28" dia, 100 ft long | 7306 |
| **Special Cable Connector**<br>with two female ends<br>for Wohler VIS 400 | 9184 |

| Telescope | Part no. |
|---|---|
| **Wohler Telescopic Tube**<br>with flexible gooseneck<br>for camera heads Wohler VIS 400 / VIS 2000PRO and Wohler miniature camera heads. Length of the telescopic tube 3 ...5 ft plus gooseneck 1 ft . The flex and stay gooseneck remains in a bent position allowing for easy inspection. | 7005 |
| **Wohler Telescopic Tube**<br>with flexible gooseneck<br>for camera heads Wohler VIS 400 / VIS 2000PRO and Wohler miniature camera heads. Length of the telescopic tube 3 ...11 ft plus gooseneck 1 ft . The flex and stay gooseneck remains in a bent position allowing for easy inspection. | 7024 |

| Camera Viper and Cable Reel | Part no. |
|---|---|
| **Wohler Camera Viper 42**<br>with digital distance counter | |
| with GRP camera rod red, 0.28" dia, 98 ft long | 7307 |
| with GRP camera rod red, 0.28" dia, 65 ft long | 7309 |
| **Wohler VIS 400 Cable Reel**<br>with integrated distance measurement (shown on monitor display), shoulder strap and connection cable to monitor, without video cable | 7816 |
| **Wohler Camera Rod Reel 42**<br>with digital distance counter<br>for GRP camera rod 0.26" dia, 98 ft long (comes without camera rod) | 7822 |

| Localization | Part no. |
|---|---|
| **Wohler L 200 Locator (Receiver)**<br>Wohler L 200 Locator Receiver, plastic case, USB power supply with micro USB cable<br>grease crayon (12 pcs. box, yellow), telescopic rod and headphones | 7430 |

| Guidance Sets for Wohler Camera Head 2" dia | Part no. |
|---|---|
| **Wohler VIS Guidance Set 150**<br>for 2" camera head<br>protection cage, stabilization sleeve, centering star and centering star extension | 3882 |
| **Wohler VIS Guidance Set 110**<br>for 2" camera head<br>camera roller cage with protection cage and stabilization sleeve with star holder | 3881 |
| **Wohler Camera Spring Guide**<br>for 2" camera head<br>for centering of the camera head in vertical vents.<br>A stainless steel spring prevents a rotating and oscillating of the camera head. The spring is adjustable on the tubing size up to 14". | 8633 |
| **Wohler Camera Holder**<br>faces down<br>for camera heads 1", 1 1/2" and 2" | 3720 |
| **Wohler Camera trolley**<br>for 2" camera head<br>with M10 and M5 connection for pushing, size: 6.3" x 4.9" x 4.9" | 9548 |
| **Wohler VIS Maxi Adaptor**<br>for camera trolley<br>for the inspection of larger ventilation ducts (from about 12") | 9549 |

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| Guidance Sets for pan & tilt Wohler Camera Head 1 1/2" dia | Part no. |
|---|---|
| **Relining Adapter for VIS 3xx** | 6888 |
| **Re-lining adapter set**<br>consisting of:<br>re-lining adapter, centering star and 3 x stabilization sleeve | 6889 |
| **Wohler Guidance Set 100 for VIS 3xx**<br>pan and tilt camera head 1 1/2" dia<br>protection sleeve with cut-out, roller guide and centering star | 4240 |

| Guidance Sets for pan & tilt Wohler Camera Head 1" dia | Part no. |
|---|---|
| **Re-lining adapter set**<br>consisting of:<br>re-lining adapter, centering star and 3 x stabilization sleeve | 6889 |
| **Wohler VIS Guidance Set 70**<br>for 1" camera head<br>guidance sleeve with protection cage and centering star | 3883 |

| Components for Wohler Camera Head 2" dia | Part no. |
|---|---|
| **Wohler camera protection with brushes**<br>for 2" camera head | 3855 |
| **Wohler camera roller guide**<br>with protection cage<br>for 2" camera head | 7826 |
| **Wohler stabilization sleeve**<br>for 2" camera head | 3590 |
| **Wohler stabilization sleeve**<br>for 2" camera head<br>with M10 male thread | 3591 |

| Components for Wohler Miniature Camera Head 1" dia | Part no. |
|---|---|
| **Wohler Guidance Sleeve**<br>for 1" camera head | 3827 |
| **Wohler Guidance Sleeve**<br>with protection cage<br>for 1" camera head | 3847 |

| Components for Wohler Camera Heads 1 1/2" and 1" | Part no. |
|---|---|
| **Wohler VIS Centering Brush**<br>for Wohler VIS 400 / VIS 2xx / VIS 3xx | 3850 |
| **Wohler Guidance Weight Stainless Steel**<br>1.7 lbs. for top to bottom inspections | 3857 |
| **Wohler Camera Roller Guide**<br>for pan and tiltable camera head 1.5" | 3681 |
| **Wohler Supplementary Light Ring**<br>with white LEDs<br>for 2" pan&tilt camera head<br>for 1 1/2" pan&tilt camera head in combination with guidance weight (art. 3857), incl. battery pack with four AA batteries 1.5 V in cordura bag. | 9377 |

| Accessories | Part no. |
|---|---|
| **Wohler VIS Spare brushes**<br>24 pieces<br>for centering brush | 3858 |
| **Wohler VIS Centering Star**<br>for Wohler VIS 2xx / 3xx<br>8" diameter with 6 brushes, with thread, centers the GRP camera rod, to guide the camera head | 3854 |
| **Wohler VIS Centering Brush Extension**<br>8" diameter with inner and outer thread for endless extension | 3853 |
| **Wohler VIS Stabilization Tube**<br>for Wohler VIS 400 / 2xx / 3xx<br>extension for camera guidance system, 1.4" x 3.0" dia POM black | 21736 |
| **Wohler Guidance Ball**<br>for flex part of camera push rod | 3634 |

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| Accessories | Part no. |
|---|---|
| **Aluminium Case XXL**<br>19 x 11 x 19" | 5824 |
| **Camera Backpack** | 5560 |
| **Plastic Case Wohler VIS 400** | 4131 |
| **Power Supply**<br>for Wohler VIS 3xx / VIS 2xx<br>18V, 1.5A, 100-240V, 50 Hz, charge time 3 hours, for all countries | 3789 |
| **Car Charger**<br>Wohler VIS 2xx / 3xx, 18V | 3169 |
| **Chalk, yellow**<br>package with 12 pcs. | 1774 |
| **Wohler VIS Cleaning Set** NEW<br>34 oz disinfection spray, 50 cleaning tissues, 100 disposable gloves size XL (powder free), 7 oz lubricant,<br>plastic case; for approx. 50 applications. | 4725 |
| **Wohler VIS Cleaning Set Refill** NEW<br>34 oz disinfection spray, 50 cleaning tissues, 100 disposable gloves size XL (powder free), 7 oz lubricant,<br>plastic bag, for approx. 50 applications. | 4726 |

# Wohler L 200 Locator NEW

**COLOR DISPLAY**

**LOCATES PRECISELY**

### TECHNICAL DATA

**Locator Receiver**
Display.............................. Graphic visualization
of the position of the camera head
Output impedance
Headphones ..................... Typ. 32 ohm
Power Supply .................... 3.7 V Li-Ion Battery
Operating Temperature ..... 32...104 °F
Storage Temperature ........ 14...104 °F
Weight .............................. 1.3 lbs
Size .................................. 12" x 6" x 3" (L x W x H)

## APPLICATION

The Wohler L 200 Locator makes it possible to locate the Wohler VIS Camera heads VIS 200/250/350 wirelessly. The location of the camera head is indicated on the display screen as well as by an audible signal.

## ADVANTAGES

- Locates the radio signal transmitted by the camera head – rapidly pinpoints the location
- Easy to handle – user guided via display throughout the locating process
- Bright, easy-to-read color display
- Telescopic pole – allows the user to place the locator closer to the signal source
- Chalk holder – for chalk to mark the position where the camera head is located

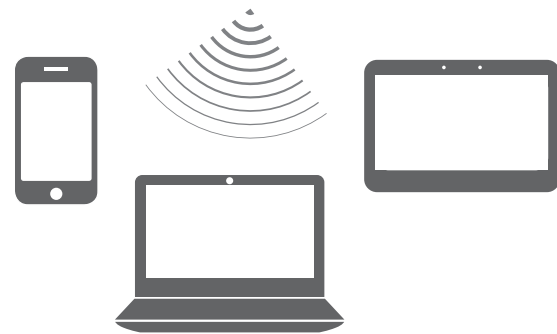### Wohler L 200 Locator (Receiver)

Wohler L 200 Locator Receiver

USB power supply with micro USB cable

Chalk (12 pcs. box, yellow)

telescopic rod

headphones

plastic case

**Part no. 7430**

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# Wohler VE 200 Video-Endoscope NEW

WiFi

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## TECHNICAL DATA

**Signal transmission**
WLAN
Network Standard ............. IEEE 802.11 b/g/n
Antenna .......................... Integrated IPEX Antenna
Frequency ........................ 2.4 GHz
Data transmission rate
wireless card with
802.11 a/b/g/n ................ up to 150 Mbit/s

**Recording**
Camera Head ................... 0.33" dia
Image Resolution ............. 2.0 Megapixels
Focus ............................. 2.36" to 4"
Video Resolution .............. 800 x 600 Pixel
1,024 x 768 Pixel
1,280 x 720 Pixel
Angle of view .................. 60°
Probe length .................... 3.28 ft

**File formats**
Image format .................... jpg
Video format .................... avi

Light source .................... 6 adjustable LEDs
Additional light source ....... 1 watt LED
Power Supply .................. 4 AA batteries

## APPLICATION
- For inspection of inaccessible cavities from 3/4" in diameter (for example: roof insulation, exhaust pipes, sinks, fireplaces)
- Transmission of image and video data via wireless (WiFi) on laptop, tablet PC or Smartphone

## ADVANTAGES
- Snapshot and Video Functions
- Direct forwarding of data - no further data transmission necessary
- Image display via wireless at all
- Compatible devices (such as netbooks, Smartphone, tablet)
- 4' gooseneck
- Video Recording
- Variable Light intensity of the flashlight for Illumination of cavities

**Wohler VE 200 Video Endoscope**

Wohler VE 200 Video Endoscope

4 ft probe, 0.33" dia

4x AA batteries

plastic case

(The VE 200 is not compatible with Windows Phone)

**Part no. 7792**

# Wohler Glass Mirror

## APPLICATION
- Inspection of objects hard to reach
- Inspection of chimneys
- Building inspection

## ADVANTAGES
- Best view with glass mirror plates
- Pan and tilt
- Aluminium frame for protection
- Easy to replace
- Telescopic handle, extendable from 6" to 40 cm

**Wohler Glass Hand Mirror 2" x 3"**

Wohler Glass Hand Mirror 2" x 3"

lleather cover

**Part no. 5064**

**Wohler Glass Mirror small with telescopic handle**

Wohler Glass Mirror small up to 40" extendable

ball joint (pan and tilt)

mirror plate 1" x 2.8"

aluminium frame

lleather cover

**Part no. 8064**

**Wohler Glass Mirror medium with telescopic handle**

Wohler Glass Mirror small up to 40" extendable

ball joint (pan and tilt)

mirror plate 2" x 3"

aluminium frame

leather cover

**Part no. 8059**

**Wohler Glass Mirror large with telescopic handle**

Wohler Glass Mirror large up to 40" extendable

ball joint (pan and tilt)

mirror plate 3" x 6"

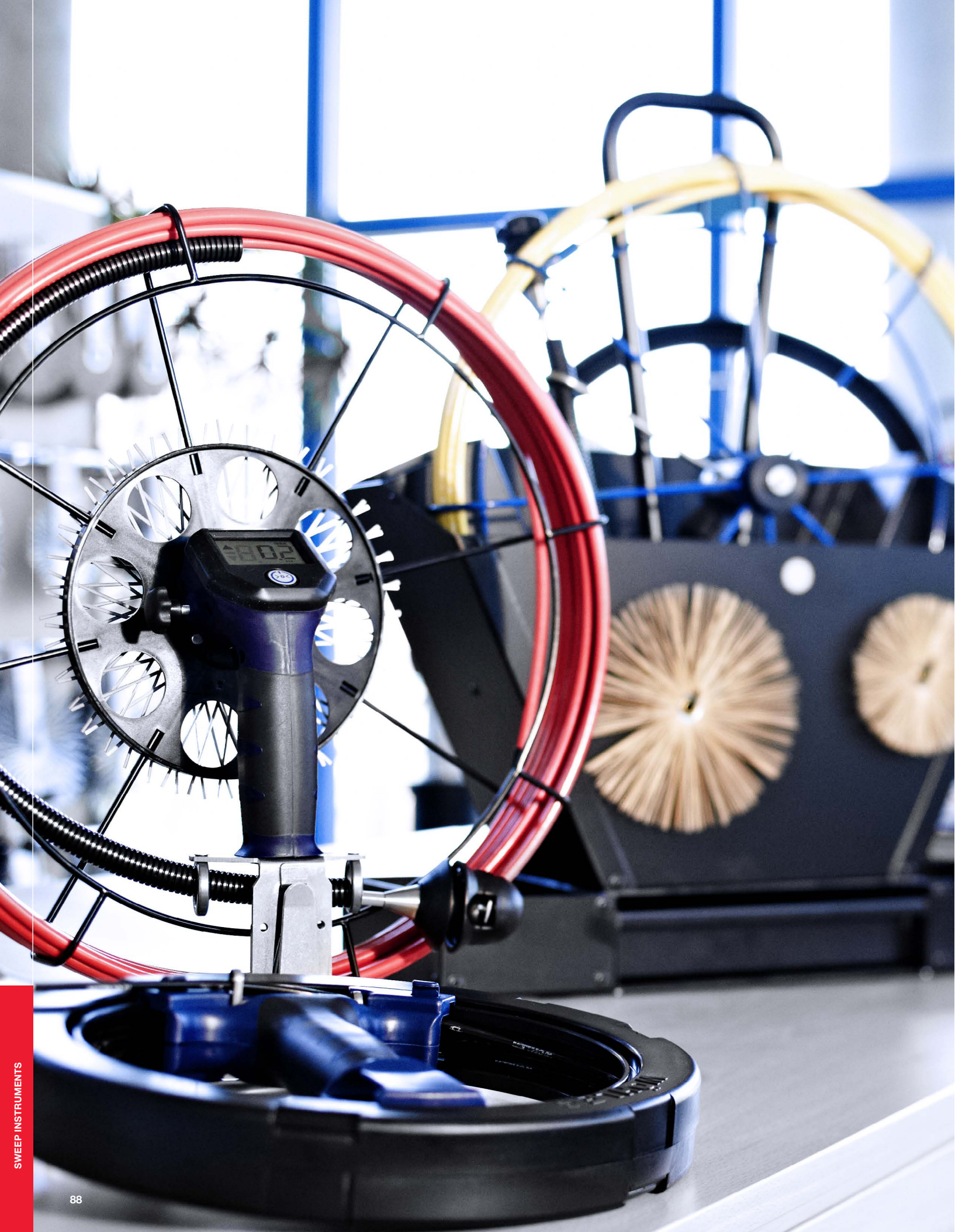aluminium frame

leather cover

**Part no. 8087**

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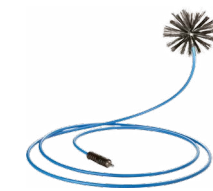
| | | Wohler Viper XL / XXL | Wohler Viper L | Wohler H 420 Viper M | Wohler Mini Viper | Wohler Handy Viper M | Wohler Rotary Viper vent | Wohler DH 420 Pneumtatic Viper |
|---|---|---|---|---|---|---|---|---|
| | | page 94 | page 92 | page 95 | page 98 | page 93 | page 101 | page 100 |
| **APPLICATIONS** | | | | | | | | |
| Chimneys (sizes in cm): | 6"...8" | | • | • | | • | | |
| | 8"...16" | | • | | | | | |
| | 16" and bigger | • | | | | | | |
| Flue Gas lines (sizes in mm): | 2"...6" | | | • | • | • | • | |
| | 6"...10" | | • | • | | • | • | |
| | 10" and bigger | • | • | | | | | |
| Air duct (sizes in mm): | 3"...6" | | | • | • | • | • | |
| | 6"...10" | | • | • | | • | • | • |
| | 10"...16" | • | | | | | | • |
| | 16" and bigger | • | | | | | | • |
| **FEATURES & BENEFITS** | | | | | | | | |
| Horizontal and vertical cleaning | | • | • | • | • | • | • | • |
| Sweeping top down | | | • | • | • | • | • | • |
| Stainless steel approved | | • | • | • | • | • | • | • |
| Portable | | • | • | • | • | • | • | • |
| Lock/brake | | • | • | • | • | • | | |
| CW/CCW rotation | | | | | | | • | |
| Extendable | | • | • | • | | • | | • |
| **TECHNICAL DATA** | | | | | | | | |
| Length / diameter | | 165 or 328 ft / GRP-Rod 0.5" dia | 50 or 65 ft / GRP-Rod 0.4" dia | 50 or 65 ft / GRP-Rod 0.3" dia | 50 ft / GRP-rod 0.2" dia | 50 or 65 ft / GRP-rod 0.3" dia | 16 or 33 ft / 0.6" dia | 33 ft / 0.4" dia |
| Size / weight | | 32" or 39" dia / 46 - 75 lbs | 23" dia / 9 - 12 lbs | 17" dia / 4 lbs | 13" dia / 2.5 lbs | 17" dia / 4 lbs | 3 lbs / 4 lbs | 17" dia / 6 lbs |
| Thread | | M10 thread | M10 thread | M10 thread | M5 thread | M10 thread | M10 thread | compressed air supply |

SWEEPING OF CHIMNEYS, VENTILATION SYSTEMS, PIPES | WOHLER VIPER L

SWEEPING OF FLUE GAS SYSTEMS | WOHLER HANDY VIPER M

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# Wohler Viper L



## TECHNICAL DATA

Cage diameter.................. 23"
Height............................. 24"
Weight ............................ 9.5 lbs – 12 lbs
Brake.............................. adjustable,
                        additional lock for transportation

## APPLICATION

For sweeping chimneys, ventilation systems or pipes

## ADVANTAGES

• Adjustable brake and safety lock
• Can be used standing upright or in horizontal position
• Integrated holder for up to 3 stars
• GRP Rod with resistant coat and length marking

**Wohler Viper L**
**50 ft. (brush not included)**

| | |
|---|---|
| GRP Rod 0.35" dia | |
| 50 ft. long | |
| two stainless steel endpieces M10 | |
| GRP-starholder 1.1" dia | |
| protection tube 31.5" long (without stars) | |
| **Part no. 9412** | |

**Wohler Viper L**
**65 ft. (brush not included)**

| | |
|---|---|
| GRP Rod 0.35" dia | |
| 65 ft. long | |
| two stainless steel endpieces M10 | |
| GRP-starholder 1.1"dia | |
| protection tube 31.5" long (without stars) | |
| **Part no. 9413** | |

| Accessories | Part no. |
|---|---|
| **GRP Rod Repair Kit** with stainless steel endpiece, screws and allen wrench 0.35" dia. | 3690 |
| **GRP Rod** with 2 stainless steel end pieces, M10 internal thread | |
| 0.35" dia, 50 ft. long | 9015 |
| 0.35" dia, 65 ft. long | 9020 |
| **Stars Stainless Steel Flat Wire** | |
| 7.8" dia, soft | 14020 |
| 10" dia, medium hard | 14125 |
| 11.8" dia, hard | 14130 |
| **Threaded Brushes Perlon** | |
| 7.9" dia, 0.02" bristles | 18720 |
| 9.8" dia, 0.02" bristles | 18725 |
| 11.9" dia, 0.02" bristles | 18730 |
| 13.8" dia, 0.02" bristles | 18735 |

# Wohler Handy Viper M



## APPLICATION

Perfect tool for cleaning flue gas systems, chimneys of up to 10" dia as well as ducts and pipework

## TECHNICAL DATA

Cage diameter.................. 17"
Width.............................. 4"
Weight ............................ 5 lbs
                        incl. 50 ft GRP rod
Freewheel brake.............. precisely adjustable

## ADVANTAGES

• GRP Rod with resistant coat and length marking
• Precisely adjustable brake (DGBM patented)
• Integrated holder for up to 2 stars
• Belt clip for sweeping and carrying
• For threaded brushes and stars
• Very light weight

**Wohler Handy Viper M**
**50 ft. with push head (brush not included)**

| | |
|---|---|
| Wohler Handy Viper M | |
| GRP rod, 50 ft. | |
| (without stars) | |
| **Part no. 7649** | |

**Wohler Handy Viper M**
**65 ft. with push head (brush not included)**

| | |
|---|---|
| Wohler Handy Viper M | |
| GRP rod, 65 ft. | |
| (without stars) | |
| **Part no. 7648** | |

| Accessories | Part no. |
|---|---|
| **GRP Rod Repair Kit** with stainless steel endpiece, srews and allen wrench 0.3" dia | 3696 |
| **GRP Rod** with 1 stainless steel end piece, M10 internal thread | |
| 0.35" dia, 50 ft long | 7015 |
| 0.35" dia, 65 ft long | 7020 |
| **Stars Stainless Steel Flat Wire** | |
| 7.8" dia, soft | 14020 |
| 10" dia, medium hard | 14125 |
| 11.8" dia, hard | 14130 |
| **Threaded Brushes Perlon** | |
| 7.9" dia, 0.02" bristles | 18720 |
| 9.8" dia, 0.02" bristles | 18725 |
| 11.9" dia, 0.02" bristles | 18730 |
| 13.8" dia, 0.02" bristles | 18735 |
| **Stars, PEK** | |
| 6" dia | 13815 |
| 7.9" dia | 13820 |
| 9.8" dia | 13825 |

# Wohler Viper XL / XXL

**TECHNICAL DATA**

**Wohler Viper XL**
Cage diameter.................. 31.5"
Width............................. 20"
Height............................ 37"
Weight............................ 46 lbs

**Wohler Viper XXL**
Cage diameter.................. 40"
Width............................. 20"
Height............................ 46"
Weight............................ 75 lbs

## APPLICATION
- For sweeping large chimneys, ventilation systems or pipes

## ADVANTAGES
- GRP Rod with resistant coat and distance marking
- A camera trolley with a Wohler VIS 400 camera head can be installed and pushed

**Wohler Viper XL**
**(brush not included)**

| viper cage 31.5" and wheels |
| --- |
| GRP Rod 0.4" dia with stainless steel endpieces M10, 164 ft long |
| GRP-starholder 1.1" dia, without stars |
| **Part no. 3332** |

**Wohler Viper XXL**
**(brush not included)**

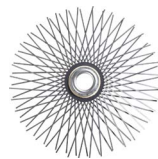| viper cage 40" and wheels |
| --- |
| GRP Rod 0.4" dia with stainless steel endpieces M10, 328 ft long |
| GRP-starholder 1.1" dia, without stars |
| **Part no. 3337** |

| Accessories | Part no. |
| --- | --- |
| **GRP Rod Repair Kit** <br> with stainless steel end piece, screws and allen wrench 0.43" dia. | **3691** |
| **Stars Stainless Steel Flat Wire** | |
| 7.8" dia, soft | **14020** |
| 10" dia, medium hard | **14125** |
| 11.8" dia, hard | **14130** |
| **Threaded Brushes Perlon** | |
| 7.9" dia, 0.02" bristles | **18720** |
| 9.8" dia, 0.02" bristles | **18725** |
| 11.9" dia, 0.02" bristles | **18730** |
| 13.8" dia, 0.02" bristles | **18735** |

# Wohler H 420 Viper M

Digital Meter Counter

**TECHNICAL DATA**
Cage diameter.................. 17"
Width............................. 4"
Weight.............................. 4.4 lbs incl. 50 ft GRP rod
Freewheel brake............... precisely adjustable
resolution meter counter ... 0.1 m

## APPLICATION
Perfect tool for cleaning flue gas systems, chimneys of up to 10" dia as well as ducts and pipework

## ADVANTAGES
- Digital meter counter
- Precisely adjustable brake (DGBM patented)
- Integrated holder for up to 2 stars
- Belt clip for sweeping and carrying
- For push head brushes, stars and sponges
- Very light weight

**Wohler H 420 Handy Viper, 50 ft. with digital distance measurement**

GFK-rod 0.28" dia

threaded star holder (brush not included)

| **Part no. 3770** |
| --- |

**Wohler H 420 Handy Viper 65 ft. with digital distance measurement**

GFK-rod 0.28" dia

fast change star holder (brush not included)

| **Part no. 3790** |
| --- |

| Accessories | Part no. |
| --- | --- |
| **GRP Rod Repair Kit** <br> with stainless steel endpiece, srews and allen wrench 0.3" dia | **3696** |
| **GRP Rod** <br> with 1 stainless steel end piece, M10 internal thread | |
| 0.35" dia, 50 ft long | **7015** |
| 0.35" dia, 65 ft long | **7020** |
| **Stars Stainless Steel Flat Wire** | |
| 7.8" dia, soft | **14020** |
| 10" dia, medium hard | **14125** |
| 11.8" dia, hard | **14130** |
| **Threaded Brushes Perlon** | |
| 7.9" dia, 0.02" bristles | **18720** |
| 9.8" dia, 0.02" bristles | **18725** |
| 11.9" dia, 0.02" bristles | **18730** |
| 13.8" dia, 0.02" bristles | **18735** |

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

MEASURING INSTRUMENTS LEAKAGE AND PRESSURE

MEASURING INSTRUMENTS IAQ/BUILDING

VISUAL INSPECTION

SWEEP INSTRUMENTS

SWEEP INSTRUMENTS

**!**
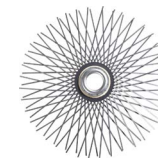
## BRUSH TYPES AND RECOMMENDED APPLICATIONS / USES

**Stainless Steel Crimped Wire:**
Thin Stainless steel wires that have been crimped.  Excellent for soft to medium soot in all chimneys
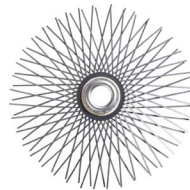
**Stainless Steel Flat Wire:**
Premium flat wire for harder deposits in masonry/tile Chimneys

**Perlon:**
Black Plastic Fiber for light condition sweeping in stainless steel chimneys. Heat tolerant to 122 °F

**PEK:**
High Tech Synthetic Fiber for light condition sweeping in Stainless steel chimneys, ducts, pellet stoves. Heat Tolerant to 300 °F

| Stars | Part no. |
|---|---|
| **Star, Stainless Steel, Flat Wire** | |
| 6" dia, soft | 14015 |
| 7.8" dia, soft | 14020 |
| 10" dia, medium hard | 14125 |
| 11.8" dia, hard | 14130 |
| 13.8" dia, hard | 14135 |
| 15.8" dia, very hard | 14240 |
| **Star, Stainless Steel, Crimped Wire** | |
| 6" dia | 14315 |
| 7.8" dia | 14320 |
| 9.8" dia | 14325 |
| 11.8" dia | 14330 |
| **Star, PEK** | |
| 6" dia | 13815 |
| 7.9" dia | 13820 |
| 9.8" dia | 13825 |
| 11.8" dia | 13830 |
| **Star, Perlon** | |
| 6" dia 0.05" bristles | 2019 |
| 7.9" dia 0.05" bristles | 2752 |
| 9.8" dia 0.05" bristles | 2755 |
| 11.8" dia 0.05" bristles | 2018 |
| 15.7" dia 0.08" bristles | 8140 |

| Threaded Brushes | Part no. |
|---|---|
| **Threaded Brush, Stainless Steel, Flat Wire** with M10 thread | |
| 6" dia, soft | 18915 |
| 7.9" dia, medium hard | 18420 |
| 9.8" dia, medium hard | 18425 |
| 11.8" dia, hard | 18530 |
| 13.8" dia, hard | 18535 |
| **Threaded Brush, Stainless Steel, Crimped Wire** with M10 thread | |
| 6" dia | 19115 |
| 7.9" dia | 19120 |
| 11.8" dia | 19125 |
| **Threaded Brush, PEK** | |
| 6" dia | 18815 |
| 7.9" dia | 18820 |
| 9.8" dia | 18825 |
| **Threaded Brush, Perlon** | |
| 6" dia, 0.02" bristles | 18715 |
| 7.9" dia, 0.02" bristles | 18720 |
| 9.8" dia, 0.02" bristles | 18725 |
| 11.9" dia, 0.02" bristles | 18730 |
| 13.8" dia, 0.02" bristles | 18735 |
| 15.7" dia, 4 layers, 0.08" bristles | 18740 |
| 19.7" dia, 4 layers, 0.08" bristles | 18750 |

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SWEEP INSTRUMENTS

# Wohler Mini Viper

## APPLICATION

Perfect tool for cleaning:
• Flue Gas Systems
• Chimneys
• Ducts
• Pipeworks

### TECHNICAL DATA

Cage diameter.................. 13"
Weight............................. 2.2 lbs incl. 50 ft GRP rod
Freewheel brake.............. precisely adjustable

### ADVANTAGES

• lightweight, 2.2 lbs only
• GRP-Rod with resistant PA coating and distance marking
• Foldable handle
• Belt clip
• Ergonomic shape

### Wohler Mini Viper
**with handle and belt clip** (brush not included)

| | |
|---|---|
| GRP Rod 0.2" dia, 50 ft long | |
| stainless steel endpiece M5 | |
| guidance adapter | |
| protection tube | |

**Part no. 8872**

| Accessories | Part no. |
|---|---|
| **Mini hole star, PEK** | |
| 2.8" dia | 8644 |
| 3.9" dia | 8645 |
| 5.1" dia | 8646 |
| 6" dia | 8647 |
| 7.9" dia | 8648 |
| **Threaded Brush, PEK** with M5 male thread | |
| 2.8" dia | 3803 |
| 3.9" dia | 8076 |
| 5.1" dia | 7091 |
| 5.9" dia | 3839 |
| 7.9" dia | 7990 |

| Accessories | Part no. |
|---|---|
| **GRP Rod Repair Kit** with stainless steel end piece, screws and allen wrench 0.18" | 3687 |

# Wohler Compressed Air Cleaning – Standard Set

## APPLICATION

Appropriate for small, round ventilation pipes up to 5" dia.

## ADVANTAGES

• Counterclockwise rotating helicopter nozzle causes a forward movement
• Easy operation
• Cleaning of pipes up to 23 ft possible

### Wohler Compressed Air Cleaning Standard Set

| | |
|---|---|
| compressed air hose 23 ft incl. cock | |
| Wohler counterclockwise rotating helicopter nozzle | |
| plastic case | |

**Part no. 7560**

# Wohler Compressed Air Cleaning – Professional Set

### TECHNICAL DATA

**Pneumatic Viper**
Weight............................. 5 lbs (incl. hose 33 ft)
Braking effect................... adjustable break

**Compressed-air hose**
Length ............................. 33 ft
Gain................................. GRP-barrel

**Viper Cage**
Diameter.......................... 17"
Material ........................... stainless plastic coated

**Digital Distance Measurement**
Measuring Unit................. meter or feet (m or ft)
Resolution ........................ 0.1
Battery............................. 3.6 V lithium-ion battery

**Demands on a connecting compressor unit**
Pressure .......................... up to 10 bar
Output power ................... 120 V
Boilercontent.................... 50 l

### Wohler Compressed Air Cleaning Professional Set

| | |
|---|---|
| Wohler DH 420 Air Operating Viper | |
| 33 ft compressed air GRP hose incl. cock and compressed air connection | |
| compressed air hose reel with 65 ft hose | |
| Wohler compressed air planishing mallet 7-time 1.6 ft long | |
| Wohler counterclockwise rotating helicopter nozzle | |
| guidance roller ball | |
| XXL-plastic case | |

**Part no. 7570**

## APPLICATION

Appropriate for round and angular ventilation pipes

## ADVANTAGES

• Easy operation of the Pneumatic Viper due to the belt holder
• Appropriate for small and big pipes
• Extension possible due to the hose reel

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

MEASURING INSTRUMENTS LEAKAGE AND PRESSURE

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VISUAL INSPECTION

SWEEP INSTRUMENTS

SWEEP INSTRUMENTS

COMPRESSED AIR CLEANING | WOHLER DH 420 | ACCESSORIES

CLEANING OF VENTILATION SYSTEMS | WOHLER ROTARY VIPER VENT

MEASURING INSTRUMENTS FLUE GAS ANALYSIS

MEASURING INSTRUMENTS LEAKAGE AND PRESSURE

MEASURING INSTRUMENTS IAQ/BUILDING

VISUAL INSPECTION

# Wohler DH 420 Pneumatic Viper

**Digital Meter Counter**

## APPLICATION

The ideal instrument for cleaning ventilation pipes

## ADVANTAGES

- Easy operation due to the belt holder – you have free hands!
- Cleaning of 10 m pipes possible
- Due to the glass fiber reinforced plastic the hose can be pushed easily

**Wohler DH 420 Pneumatic Viper with 33 ft compressed air hose**

GRP hose incl. cock

compressed air connection

**Part no. 7580**

| Accessories | Part no. |
|---|---|
| **Wohler Roller guide ball** <br> Compressed Air Cleaning <br> for guiding the Wohler DH 420 Air Operating Viper in angular shaped ventilation pipes | 7552 |
| **Wohler helicopter nozzle** <br> backwards rotating <br> appropriate for compressed air cleaning, combined with brushes and blast pipe effect for persistant contamination in small ducts | 7556 |
| **Wohler helicopter nozzle** <br> forwards rotating <br> appropriate for compressed air cleaning, combined with brushes and blast pipe effect for persistant contamination in small ducts | 7557 |
| **Wohler Compressed Air Whip with 7 ends** <br> Compressed Air Cleaning <br> inside Ø 2.0 mm, 1.6 ft long, particular suitable for bigger pipe diameters | 7562 |
| **Hose Reel - 65 ft hose** <br> Compressed Air Cleaning <br> incl. 5 ft connecting hose and adapter plug | 7565 |
| **Wohler Sealing Set** <br> Ventilation <br> includes: sealing bladder size 3 for 4 – 9.8" dia and size 5 for 7.9" – 15.7" dia, with release valve | 7506 |
| **Wohler TA 420 Thermoanemometer** <br> includes: Wohler TA 420 with telescope tube, 4 batteries 1,5 V Typ AA plastic case | 4605 |
| **Wohler FA 430 Fan Anemometer** NEW <br> incl. $CO_2$-Measurement <br> Wohler FA 430 Fan Anemometer, 4 x AAA batteries, plastic carrying case | 4147 |
| **Air Flow Funnel K 75** <br> for Wohler A 600 / TA 420 <br> range 30-750 m³/h <br> size 1 x 1 x 1.2 ft | 53793 |
| **Aluminium Case XXL** <br> 19" x 11" x 19" | 5824 |

# Wohler Rotary Viper Vent
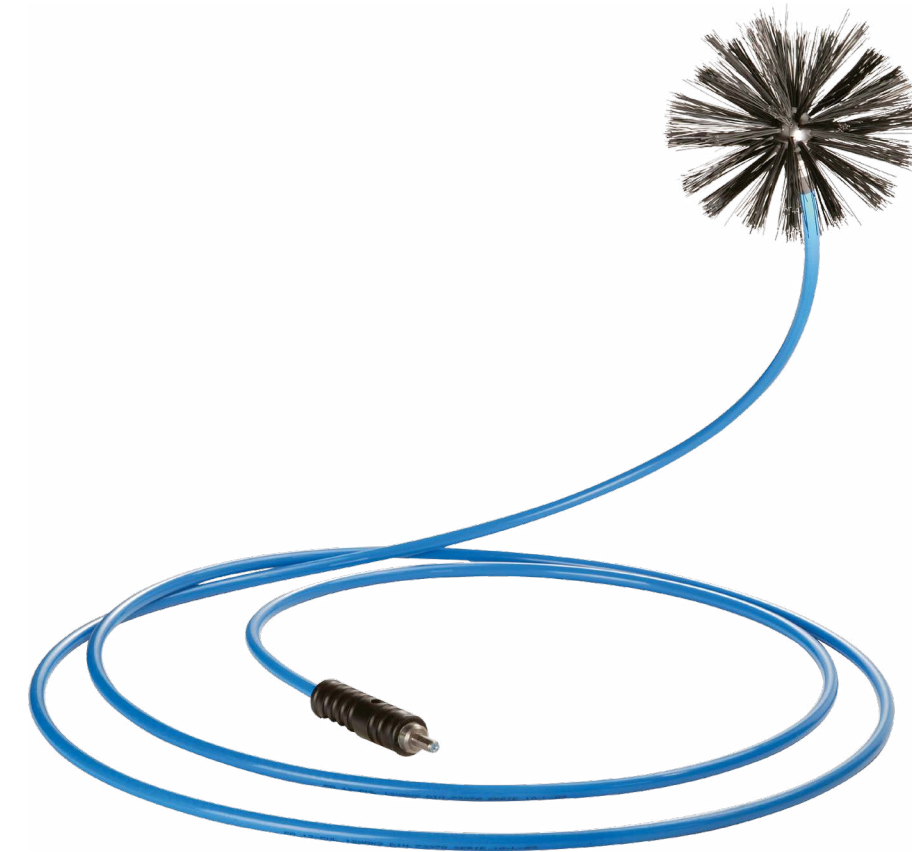
## TECHNICAL DATA

| | |
|---|---|
| Length | 16 ft or 33 ft |
| Coat | very flexible, 0.6" dia |
| Threaded connection | internal M10 |
| Tap for drill chuck | 0.4" dia |
| Core | 0.4" dia, CW/CCW rotation |

## ADVANTAGES

- CW/CCW rotation
- Due to a small end piece also applicable for smaller bends
- Very light weight 2.2 lbs
- Extremely flexible shaft
- Can be operated with battery driven drill

## APPLICATION

Effective cleaning of dryer vents, duct and piping

**Wohler Rotary Viper Vent 5 ft long**

Rotary Viper Vent

Perlon brush 7"

**Part no. 4882**

**Wohler Rotary Viper Vent 9.8 ft long**

Wohler Rotary Viper Vent

Perlon brush 7"

**Part no. 4867**

**Wohler Rotary Viper Vent 16.4 ft long**

Wohler Rotary Viper Vent

Perlon brush 7"

**Part no. 4832**

**Wohler Rotary Viper Vent 33 ft long**

Wohler Rotary Viper Vent

Perlon brush 7"

**Part no. 4866**

**Wohler Rotary Viper Vent Set 33 ft long**

Wohler Rotary Viper Vent 33 ft long

Perlon brush 7"

Perlon brush 7.9"

Perlon brush 11.8"

**Part no. 7511**

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- How to benefit from Wohler's advanced technology and ease-of-use design

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- Combustion Testing
- Carbon Monoxide Testing
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