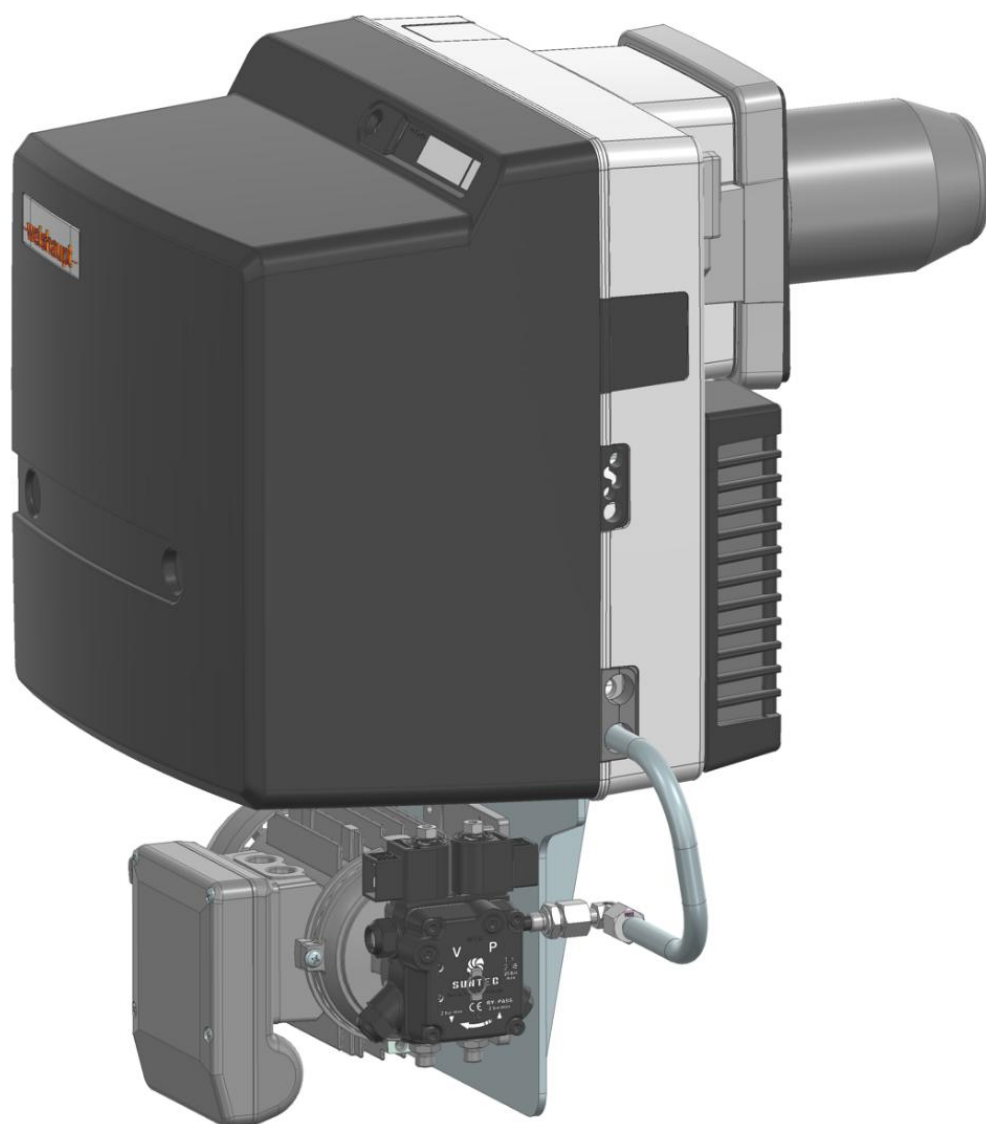


–weishaupt–

manual

Supplementary manual



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1 User guide

1 User guide

Translation of original manual

This manual forms part of the equipment and must be kept on site.



Carefully read the manual prior to working on the unit.

This instruction replaces or supplements chapters in the installation and operating manual of the burner.



All other information and safety instructions in the installation and operating manual remain valid and must be observed.



Danger due to non-observance of the safety instructions

All safety instructions in the installation and operating manual must be observed. Failure to do so may result in property damage, environmental damage, personal injury or death.

- ▶ Observe safety instructions in the installation and operating manual.
-

2 Product description

2 Product description

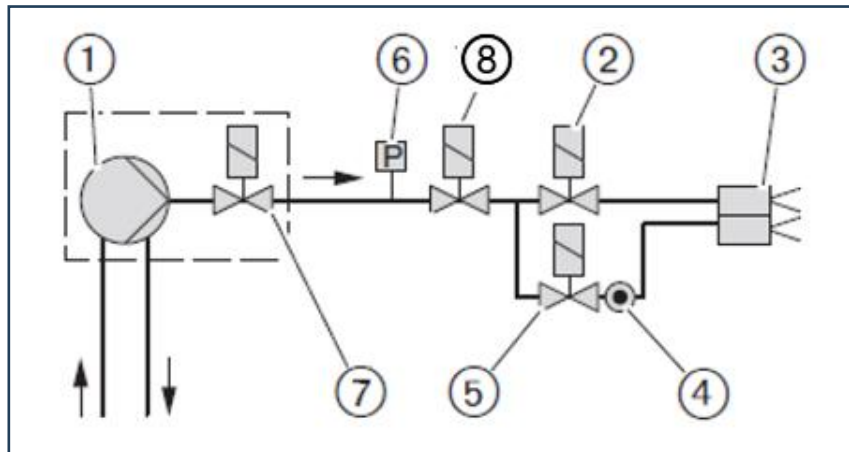
2.1 Oil supply

The oil pump is driven by a separate pump motor. The pump is only in operation during heat demand. With the separate pump motor, a low oil pressure switch, an air pressure switch and a venting valve air pressure switch are used.

Functional diagrams

Single-stage pump

- WL20/2-C Z
- WL30Z-C
- WL40Z-A

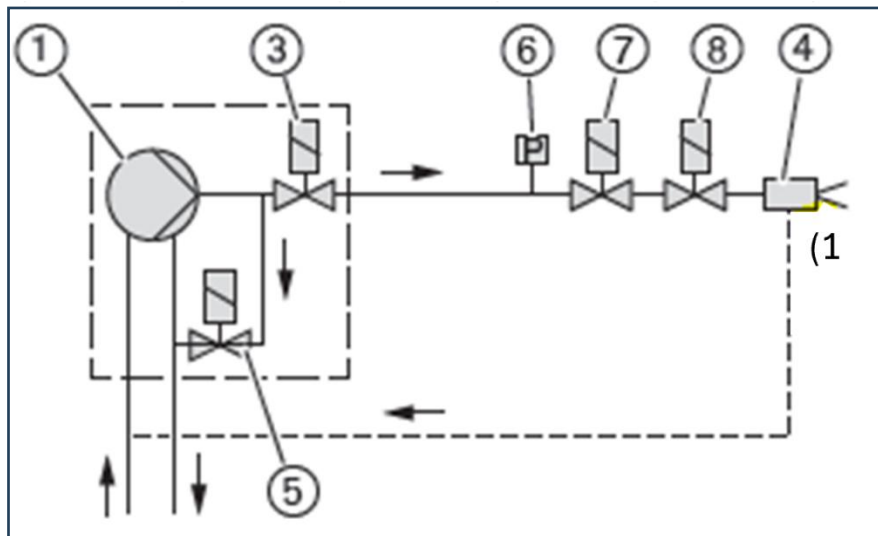


- ① Separately driven oil pump, external to burner
- ② Solenoid valve for stage 1 (normally closed)
- ③ Nozzle head with 2 nozzles
- ④ Throttle orifice (not with WL20/2-C Z)
- ⑤ Solenoid valve for stage 2 (normally closed)
- ⑥ Low oil pressure switch
- ⑦ Solenoid valve on oil pump (normally closed)
- ⑧ Additional safety solenoid valve (normally closed)

2 Product description

Two-stage pump

- WL10/1-D Z
- WL10/2-D Z
- WL10/3-D Z
- WL20/1-C Z
- WL20/1-C Z-1LN⁽¹⁾
- WL30/1-C Z-1LN-A⁽¹⁾
- WL40/1-A Z-1LN-A⁽¹⁾



- ① Separately driven oil pump, external to burner
- ③ Solenoid valve on oil pump (normally closed)
- ④ Nozzle head with nozzle
- ⑤ Solenoid valve stage 2 (normally open)
- ⑥ Low oil pressure switch
- ⑦ Additional safety solenoid valve (normally closed)
- ⑧ Solenoid valve for stage 1 (normally closed)

⁽¹⁾ With nozzle shut-off and spillback line

2 Product description

2.2 Electrical components

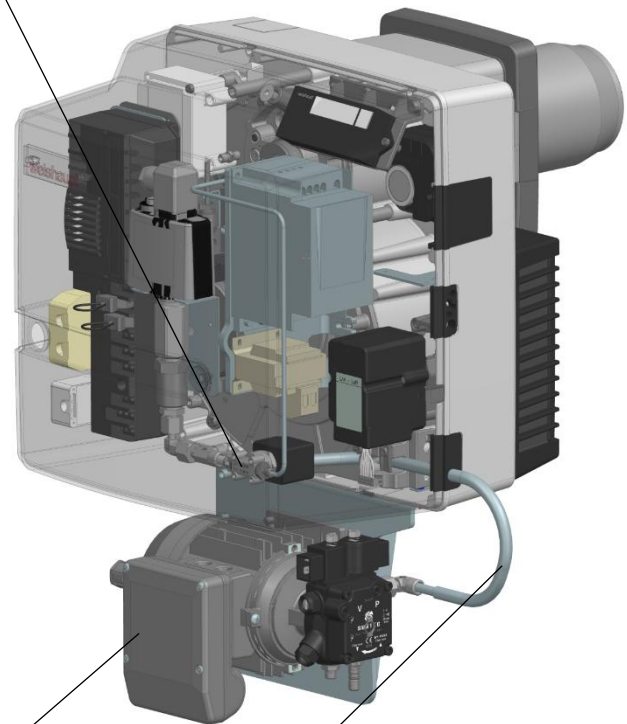
2.2.1 Pump motor

The pump motor only drives the oil pump during burner operation.

Safety solenoid valve

Solenoid valve 121Z2323 230V50Hz/240V60Hz

Order No. 654 480



Pressure hose

Pressure hose DN 4 650 mm for external pump

Order No. 491 331

Pump motor

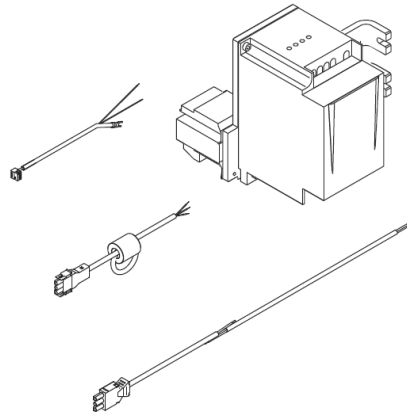
Motor ECK03/S-2P 220V 50Hz 150W for external pump

Order No. 652 173

2 Product description

2.2.2 Frequency convertor

The frequency convertor controls the speed of the burner motor in line with the required burner load. The speed and direction of rotation of the burner motor is monitored via a speed sensor.



- W10: Frequency convertor 230V parameterised W10 – Order No. on request
- W20: Frequency convertor 230V parameterised W20 – Order No. on request
- W30: Frequency convertor 230V parameterised W30 – Order No. on request
- W40: Frequency convertor 230V parameterised W40 – Order No. on request

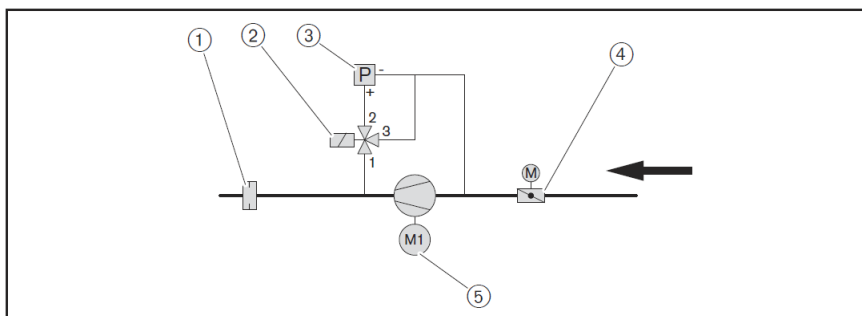
2 Product description

2.2.3 Venting valve air pressure switch

The continuous running fan prevents a backwash of heat or hot flue gases from flowing back into the burner housing.

The required air quantity can be set via the air damper position, and if necessary via the speed.

Functional diagram

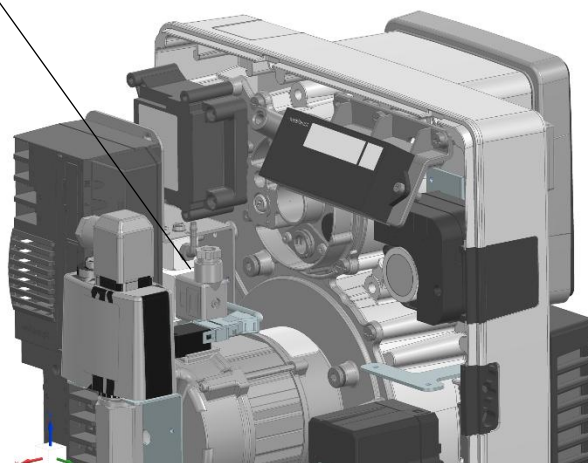


- ① Mixing head
- ② Venting valve air pressure switch
- ③ Air pressure switch
- ④ Actuator air damper
- ⑤ Burner motor for fan

Venting valve air pressure switch

Solenoid valve 131M14 220-230V 50Hz

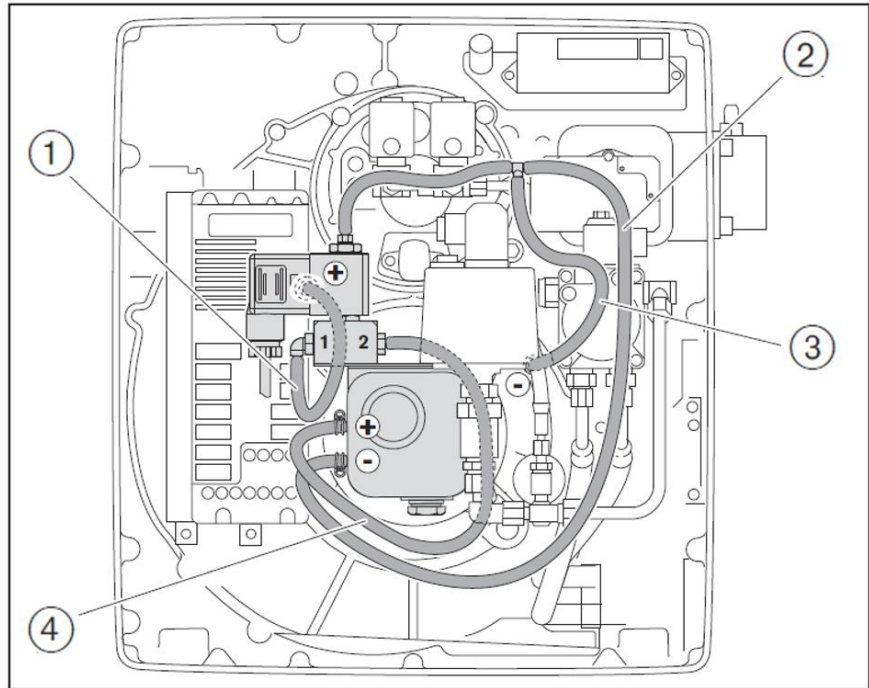
Order No. 604 378



2 Product description

Schematic description of the hose connection

- ▶ Connect hose ① to threaded socket (+).
- ▶ Connect hose ② to air pressure switch (-) and secure with hose clamp.
- ▶ Connect hose ③ to threaded socket (-).
- ▶ Connect hose ④ to air pressure switch (+) and secure with hose clamp.



2 Product description

2.3 Technical data

2.3.1 Ambient conditions with ECK motor...

Temperatures in operation, see the following print numbers:

- WL10/1-D Z: 833308xx
- WL10/2-D Z: 832927xx
- WL10/3-D Z: 832928xx

- WL20/1-C Z: 833076xx
- WL20/1-C Z-1LN: 830559xx
- WL20/2-C Z: 833077xx

- WL30Z-C: 832979xx
- WL30/1-C Z-1LN-A: 833258xx

- WL40Z-A: 832980xx
- WL40/1-A Z-1LN-A: 833197xx

2 Product description

2.3.2 Ambient conditions with W-PM motor...

Temperature in operation: -10⁽¹⁾ ... +50°C

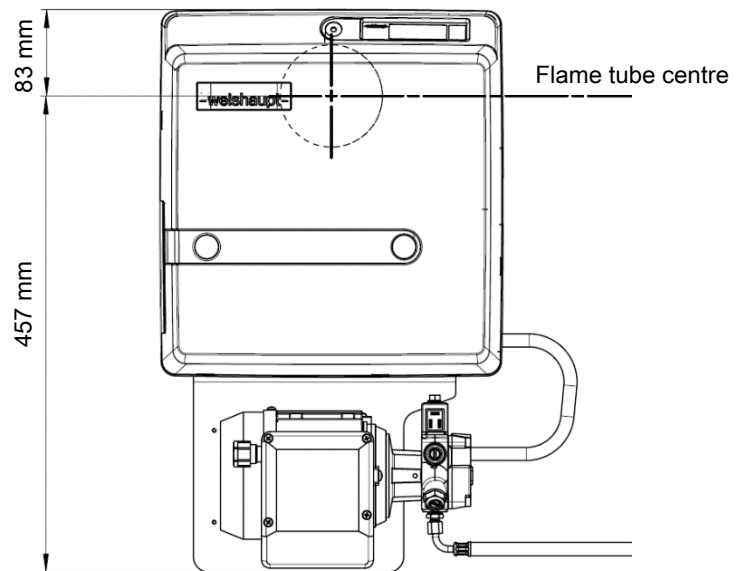
⁽¹⁾ With suitable fuel oil and version of the oil supply.

2 Product description

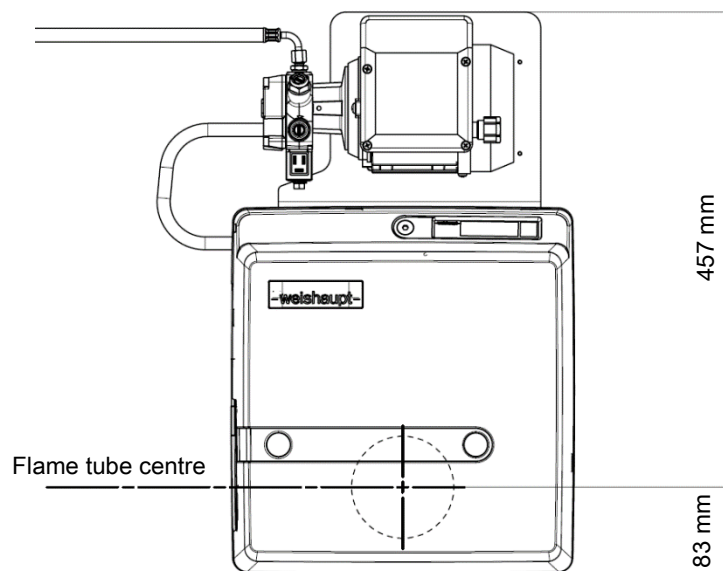
2.3.3 Dimensions

WL10

Standard



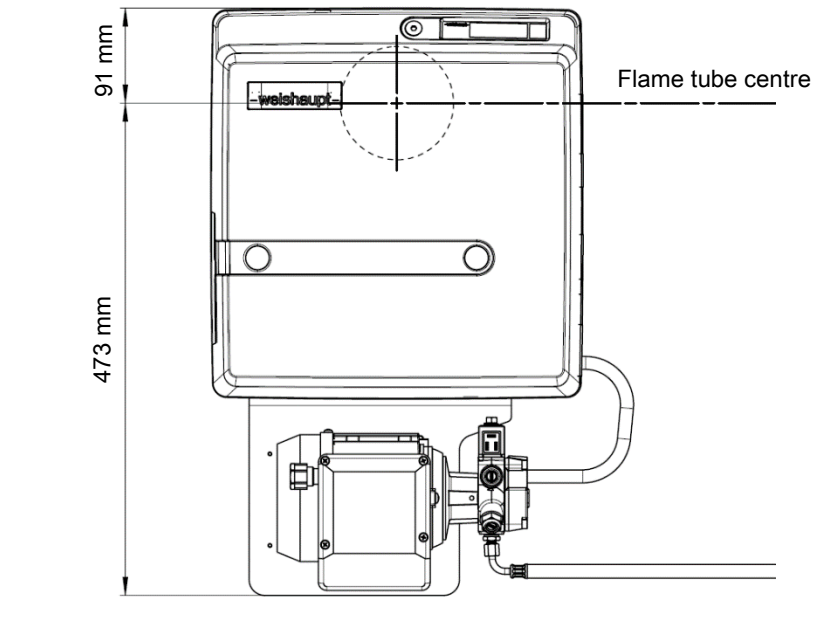
Burner rotated by 180°



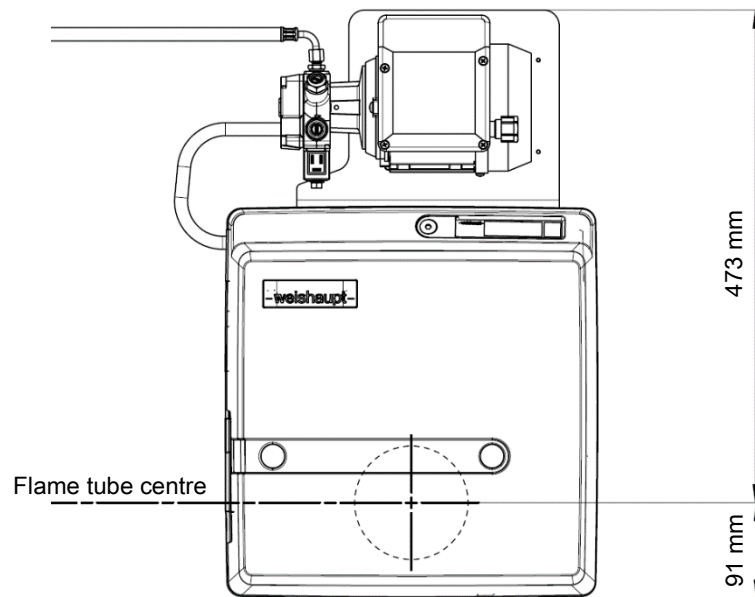
2 Product description

WL20

Standard



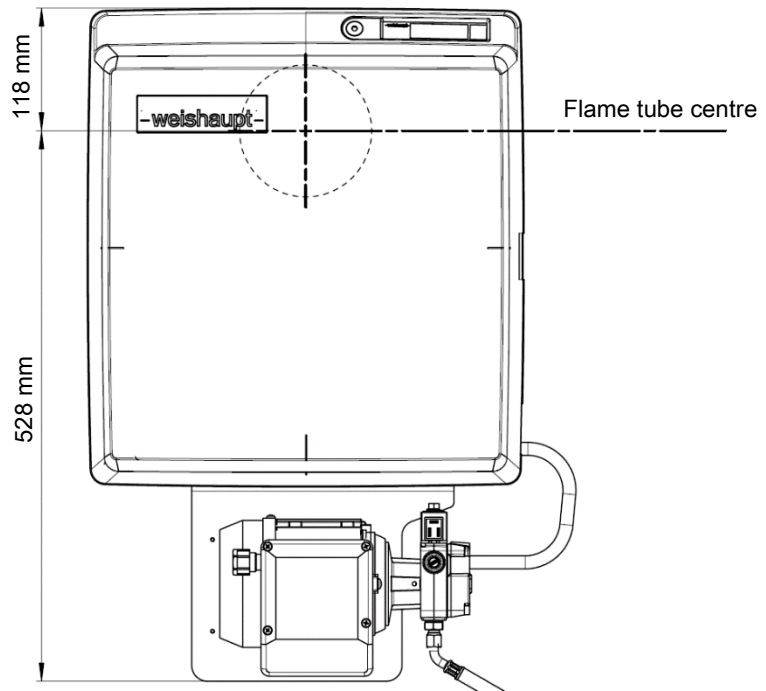
Burner rotated by 180°



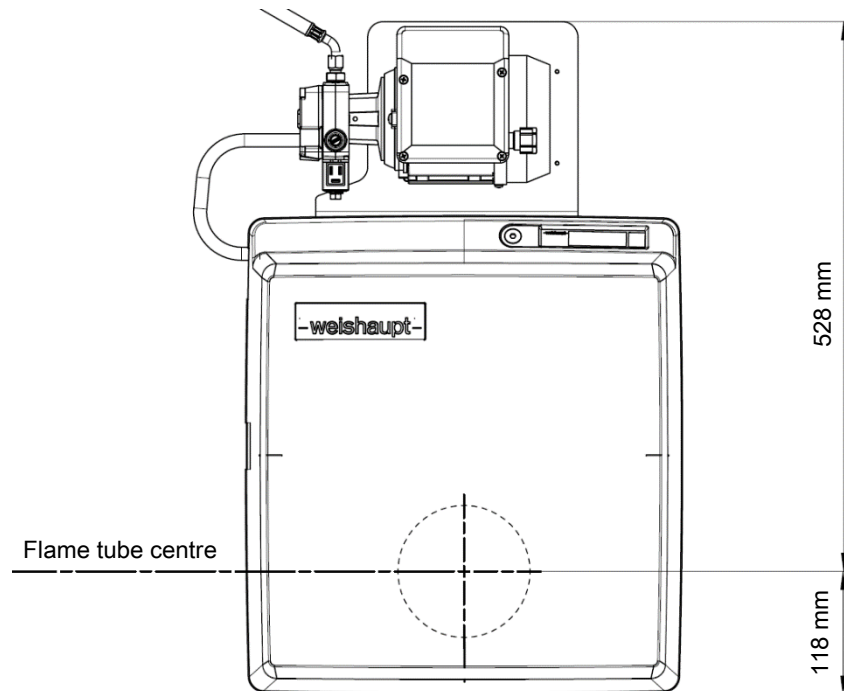
2 Product description

WL30

Standard



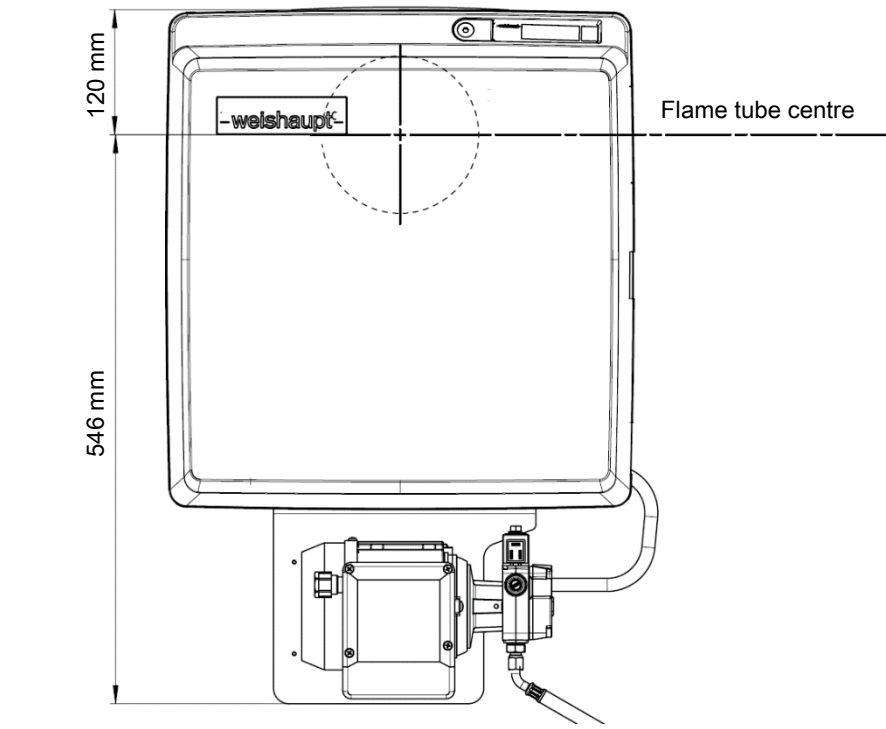
Burner rotated by 180°



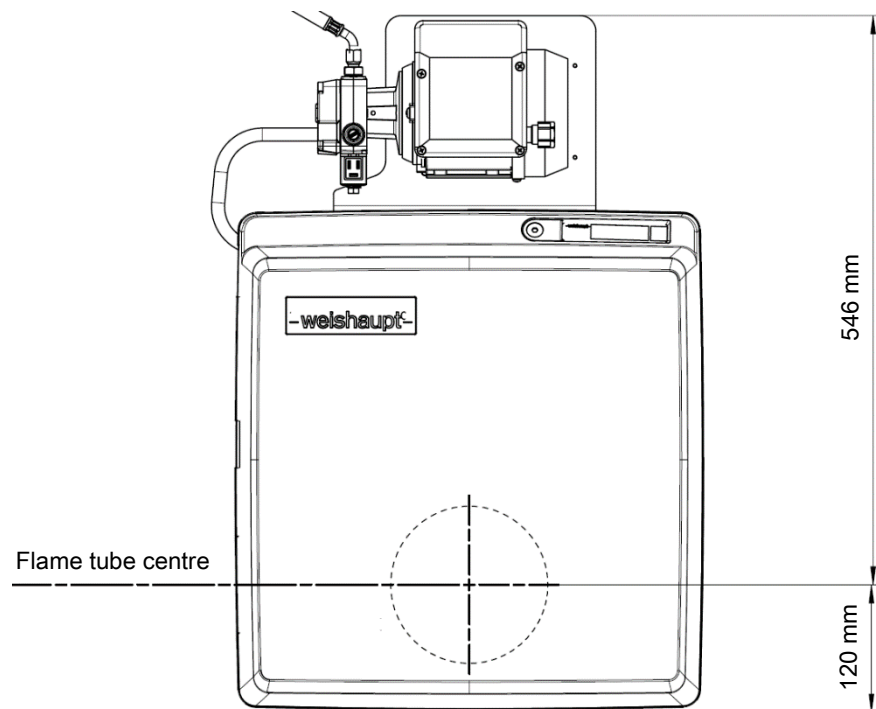
2 Product description

WL40

Standard



Burner rotated by 180°



3 Commissioning

3 Commissioning

3.1 Adjusting the burner

Adjusting the burner, see the following print numbers:

- WL10/1-D Z: 835952xx
- WL10/2-D Z: 835952xx
- WL10/3-D Z: 835952xx

- WL20/1-C Z: 835952xx
- WL20/1-C Z-1LN: 835952xx
- WL20/2-C Z: 835952xx

- WL30Z-A: 832979xx
- WL30/1-C Z-1LN-A: 833258xx

- WL40Z-A: 832980xx
- WL40/1-A Z-1LN-A: 833197xx

3 Commissioning

3.2 Setting oil pressure switch

To set the low oil pressure switch, see the following print numbers:

- WL10/1-D Z: 835952xx
- WL10/2-D Z: 835952xx
- WL10/3-D Z: 835952xx

- WL20/1-C Z: 835952xx
- WL20/1-C Z-1LN: 835952xx
- WL20/2-C Z: 835952xx

- WL30Z-C: 832979xx
- WL30/1-C Z-1LN-A: 833258xx

- WL40Z-A: 832980xx
- WL40/1-A Z-1LN-A: 833197xx

Low oil pressure switch up to 20.9% bio content

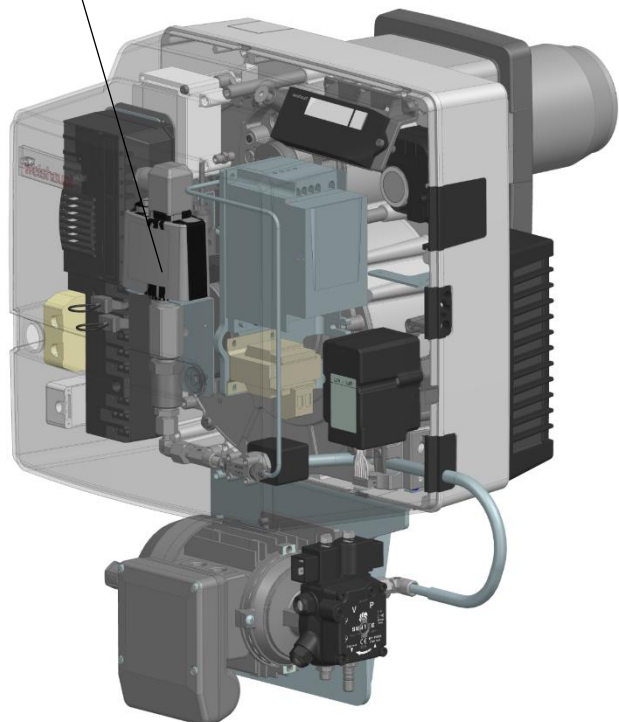
Pressure switch type DSB 158 F931 0-25 bar

Order No. 640 103

Low oil pressure switch from 21 ... 30.9% bio content

Pressure switch type DSF 158 F001 0-25 bar

Order No. 640 109



3 Commissioning

3.3 Setting air pressure switch

To set the air pressure switch, see the following print numbers:

- WL10/1-D Z: 835952xx
- WL10/2-D Z: 835952xx
- WL10/3-D Z: 835952xx

- WL20/1-C Z: 835952xx
- WL20/1-C Z-1LN: 835952xx
- WL20/2-C Z: 835952xx

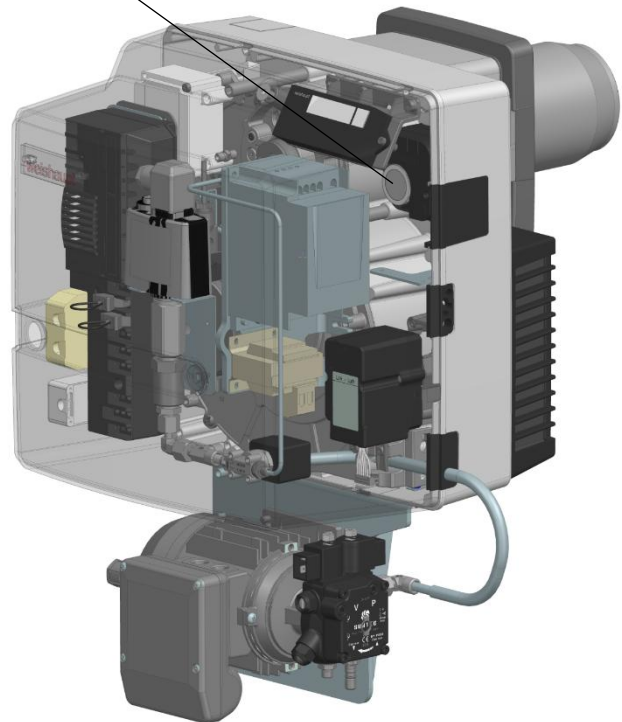
- WL30Z-C: 832979xx
- WL30/1-C Z-1LN-A: 833258xx

- WL40Z-A: 832980xx
- WL40/1-A Z-1LN-A: 833197xx

Air pressure switch

Pressure switch LGW10 1 ... 10 mbar

Order No. 691 447

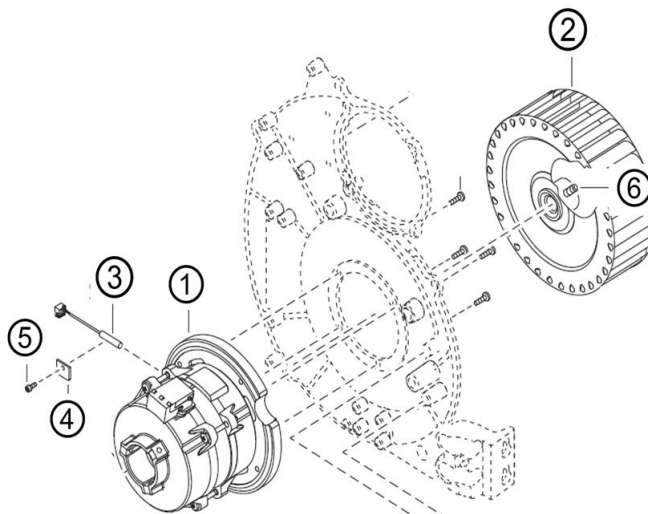


3 Commissioning

4 Service

4 Service

4.1 Installation of fan wheel, PM motor and speed sensor for WL10/20



① PM motor

- W10: Motor W-PM03/S-4 – Order No. 232 110 08 012

- W20: Motor W-PM04/S-4 – Order No. 232 210 08 022

② Fan wheel

- W10: Fan wheel W10 / speed TLR 152 x 47 – Order No. 232 110 08 012

- W20: Fan wheel W20 / speed TLR 160 x 61.6 – Order No. 232 210 08 012

③ Speed sensor KJ1.5 motor W-PM63, W10-40 – Order No. 230 310 12 782

④ Clamp 2 x 17 x 20 – Order No. 251 303 14 087

⑤ Screw M4 x 8 with coated thread – 232 110 08 027

⑥ Screw for fitting fan wheel

- W10: Threaded pin M6 x 8 with cup point – Order No. 420 549

- W20: Threaded pin M8 x 8 with cup point – Order No. 420 550

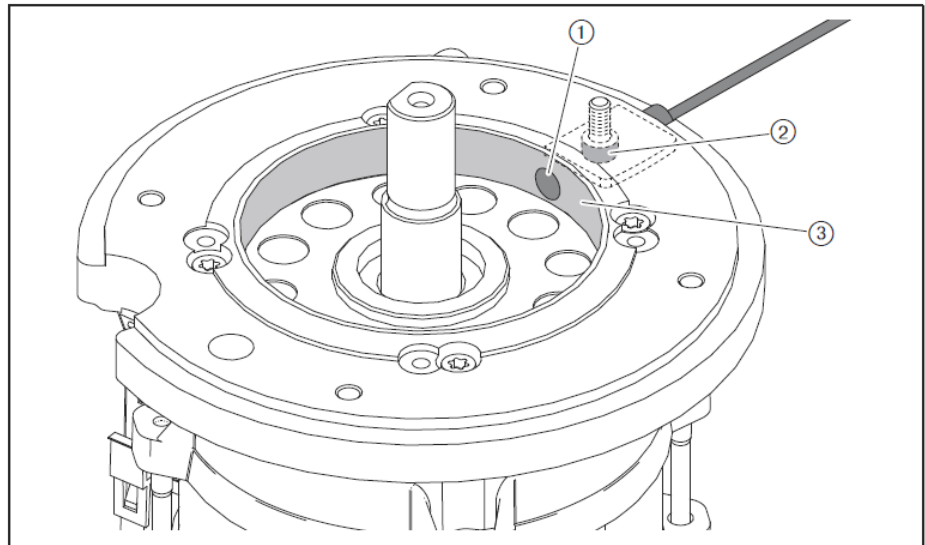
4 Service

Removing speed sensor

- ▶ Removing fan wheel, see installation and operating manual of the burner.
- ▶ Loosen locknut ② at the motor intermediate flange.
- ▶ Remove speed sensor ①.

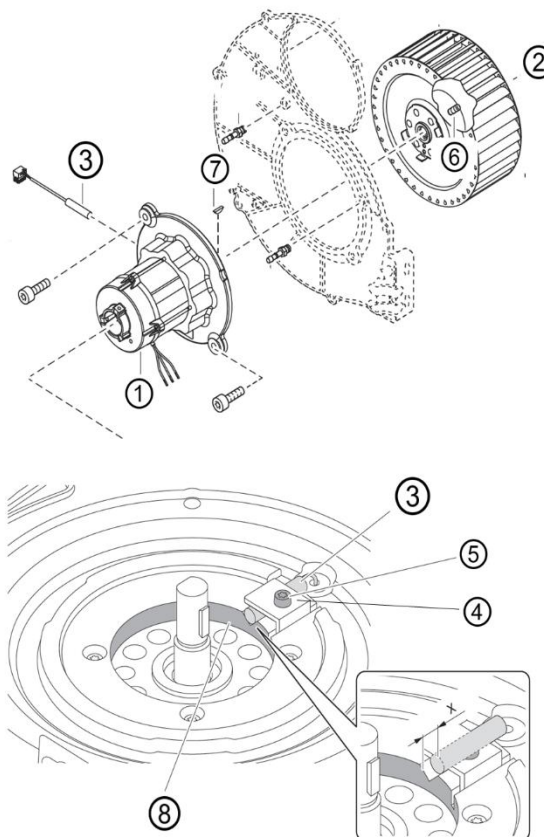
Installing speed sensor

- ▶ Install new speed sensor ① in reverse order, ensuring that the speed sensor ① is flush with the motor flange ③.



4 Service

4.2 Installation of fan wheel, PM motor and speed sensor for WL30/40



① PM motor

- W30: Motor W-PM05/S-4 – Order No. 232 310 07 182
- W40: Motor W-PM06/S-4 – Order No. 652 165

② Fan wheel

- W30: Fan wheel W30 / speed TLR-S 180 x 71.6 – Order No. 230 310 08 012
- W40: Fan wheel W40 / speed TLR 190 x 81.8 – Order No. 230 400 08 012

③ Speed sensor KJ1.5 motor W-PM63, W10-40 – Order No. 230 310 12 782

④ Clamp – Order No. 218 104 14 247

⑤ Locknut speed sensor

- For metric thread: Screw M5 x 14 DIN 7984 8.8 – Order No. 402 234
- For cast iron core drill hole: Screw M5 x 12 Torx-Plus 201P – Order No. 409 239

⑥ Threaded pin M8 x 8 with cup point – Order No. 420 550

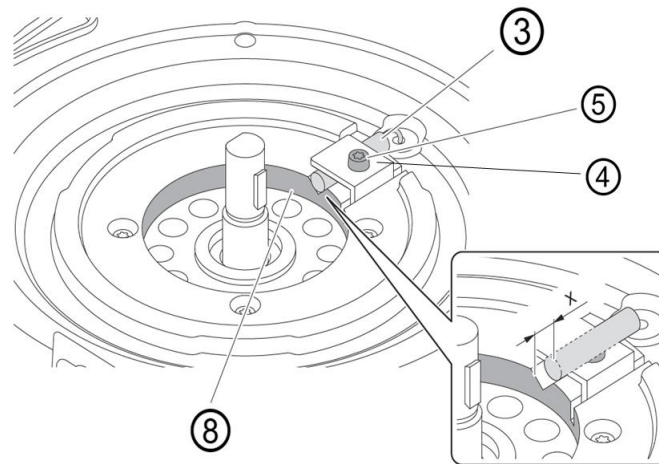
⑦ Spring washer 4 x 5 DIN 6888 C45K – Order No. 490 154

Removing speed sensor

- ▶ Removing fan wheel, see installation and operating manual of the burner.
- ▶ Loosen locknut ⑤ at the motor intermediate flange.
- ▶ Remove speed sensor ③.

Installing speed sensor

- ▶ Install new speed sensor ③ in reverse order, ensuring that the speed sensor ③ is flush with the motor flange ⑧.



Das ist Zuverlässigkeit. C'est la fiabilité. That's reliability. Questa è affidabilità. 信頼性とは、ころいろものです。Това е надеждност. Ez a megbízhatóság. Đó là sự đáng tin cậy. اردن رقابرت المومون ان است To je zanesljivost. Güvence budur. Αυτό σημαίνει αξιοπιστία. 그것은 바로 신뢰성입니다. To je spoľahlivosť. Dat is betrouwbaarheid. Tämä on luotettavuutta. هذه هي الوثوقية See on usaldusväärsus. Pouzdana tvrtka. To jest niezawodność. นั่นคือความเชื่อถือได้ Це надійність. Isto é fiabilidade. To je spolehlivost. यही विश्वसनीयता है. Det är pålitlighet. תאמינות. Esto es fiabilidad. Это надёжность. Itulah kepercayaan. 值得信賴。Is é sin iontaofacht. Iyan ang maaasahan. Aceasta este fiabilitatea. اتى سوشو ے مو. Tai - patikimumas. Det er pålitelighet. Tā ir uzticamība. Sa se fyab. To je pouzdanost. La fiabilité avant tout. Det er pålidelighed.