-weishaupt-

product

Industrial burner WKmono 80

Monoblock Industrial burner • 4,100 MBH to 58,000 MBH

For more than 6 decades Weishaupt burners have been utilized on various heat exchangers and process applications. The main reason for the success is uncompromised material quality and workmanship as well as stringent quality controls.

At company owned Research and Development center, equipped with the most modern production and design tools, originate products, which always set new standards.

Thus it was possible in shortest period of time to develop WKmono80 series, which base on the same platform as WK80 duoblock burner. Extraordinary is also the wide capacity range from 4,100 up to 58,000 MBH available in versions NR and multiflam® suitable for natural gas, propane and #2 light oil.

All burners are manufactured at production facility in Schwendi. The modern production facility is not only a show piece in terms of safety, precision and cleanliness but this also allows a quick reaction for individual requirements for compact, medium and large burner applications. Experienced personnel in various fields and a big portion of own manufactured parts ensure the highest degree of quality.

At Weishaupt you can find the whole spectrum of modern process, instrumentation and control technology all the way up to complete solution for complex building automation system.

Future oriented, economical, flexible.

Digital.

Digital combustion manager ensures economical and safe burner operation. Operation is logically simple.

Compact.

The streamline housing and specially designed air guides allow high capacity with compact design.

Strong.

Thanks to the newly developed blower fan unit, the new WKmono burner offers high performance in a compact monoblock housing.

Compact and high performance

WKmono 80 is a synergy between monoblock and duoblock burner. It retains compact and easy to service design and utilizes building blocks and casing details from the existing WK burners modular system.

The mixing head assembly can be installed and removed with help of track system in burner housing. Proven system components such safety isolating devices, oil regulation system and oil pump station, offer highest standard for flexibility and safety.
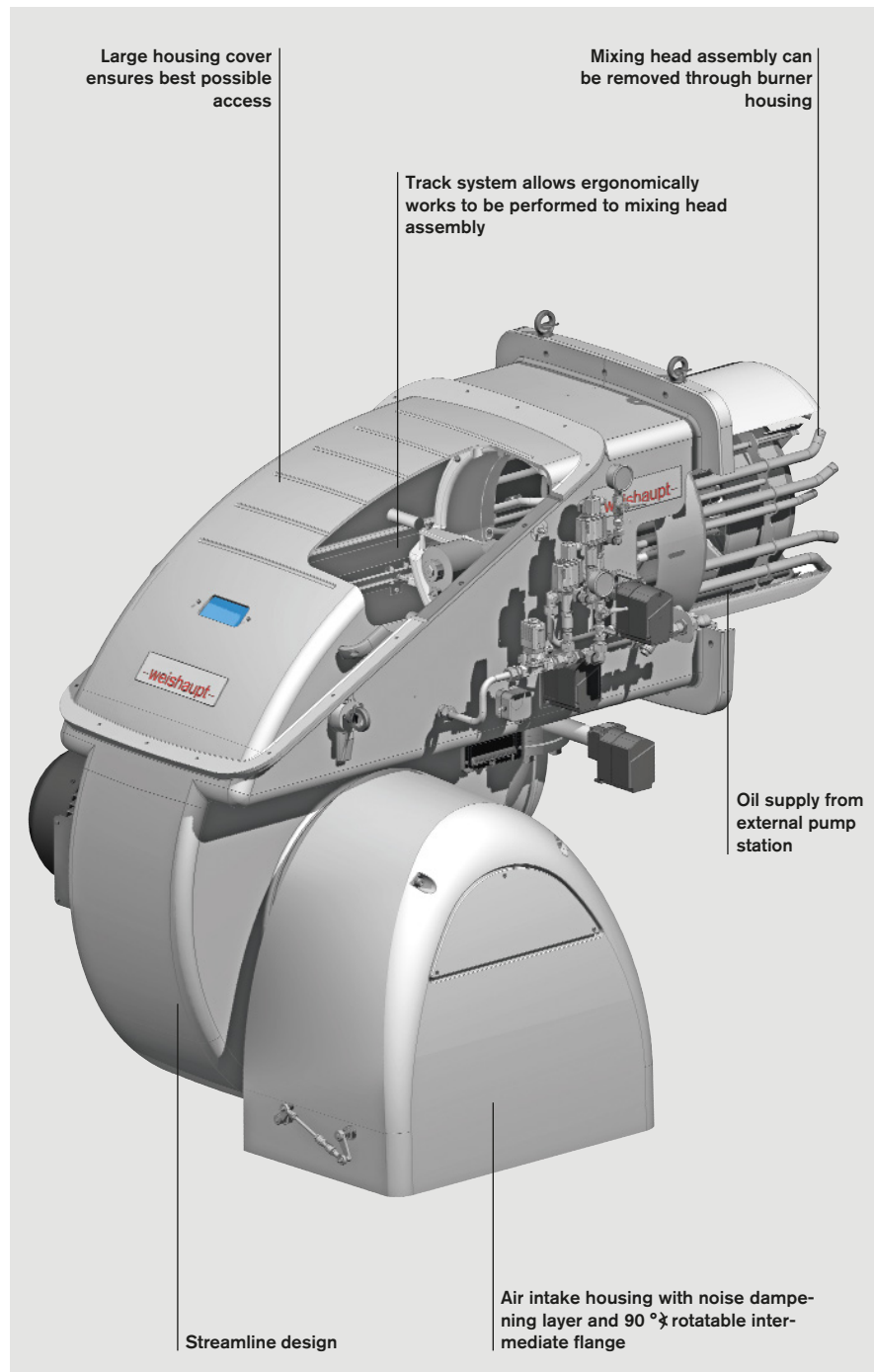
Digital reliability.
The combustion manager can simply be put as digital reliability. With numerous adaptation and application possibilities no wishes remain unfulfilled.
Variable speed drive, O_2-monitoring and control are technically proven options. Furthermore, communication possibilities with automation system are also available.

Fuel is not the same.
Mixing head assemblies which are specially designed and fine tuned to specific type of fuel are responsible for reliable operation with various oils and gases.

Weishaupt's principle: economical, efficient and reliable remains valid for the new monoblock burners.

Large housing cover ensures best possible access

Mixing head assembly can be removed through burner housing

Track system allows ergonomically works to be performed to mixing head assembly

Oil supply from external pump station

Streamline design

Air intake housing with noise dampening layer and 90 ° rotatable intermediate flange

WKmono-GL80/2-A version ZM-R-NR

Specifications

Suitable fuels
Natural gas
Propane
Light Oil #2 according to ASTM D396

Different type of fuel requires written confirmation from Weishaupt.

Applications
Weishaupt WKmono80 oil, gas and dual fuel burners are suitable to be used for the following:
▪ Installation on heat exchanger
▪ Hot water boiler
▪ Steam boiler and high pressure hot water boiler
▪ Intermittent and continuous operation
▪ Hot air generator
The combustion air must be free from any aggressive substances (Halogen, Chloride, Fluoride, etc) and contamination (dust, building materials, vapours, etc). For many cases an external air ducting to the burner is recommended as an option.

Permissible ambient conditions:
▪ Ambient temperature
  -10 to +40 °C (14 to 104F)
  -15 to +40 °C (5 to 104F)
▪ Air humidity: max. 80 % relative humidity, no condensation
▪ Suitable only for indoor operation
▪ For installation in unheated rooms under some circumstances special solutions are required (contact Weishaupt)

Any discrepancy from the above described applications requires written confirmation from Weishaupt Corporation. The maintenance interval could be shortened according to conditions where the burners are installed.

Approvals
WKmono 80 burners are in compliance with most European and North American applicable standards.

Flexible control capability
Weishaupt WKmono 80 burners are suitable for sliding-two-stage or modulating operation, depending on the type of modulating controller. Throughout its operating range burner's output is matched to the heat demand.

These multiple control options make the WKmono 80 universally adaptable to various applications. Thus results in a smooth, trouble free start and reliable operation.

NR version
Oil, gas and dual fuel burners are available in NR version for standard applications.

3LN multiflam® version
For applications with stringent NOx emission requirements oil, gas and dual fuel burner in 3LN multiflam® version is also available.

Compliance to certain emission requirement is also dependant on combustion chamber geometry, volume loading and design of the combustion system.

Digital Combustion Management: Precise, simple and safe

Digital combustion management means optimum combustion results, always repeatable operating points and easy to operate.

Weishaupt WKmono 80 series oil, gas and dual fuel burners are equipped with electronic fuel air ratio controller and digital combustion manager as standard. Modern heating applications require precise and continuously repeatable proper mixture of fuel and air. Only this way, optimum combustion values can be guaranteed over extended periods of time.

Simple operation

Programming of burner function is performed via the display and control unit. The unit is connected to the combustion manager via a BUS system.

Means for energy savings and increased safety

Electronic fuel air ratio control with W-FM combustion manager allows precise control of fuel and combustion air. Combustion efficiency is therefore increased and fuel can be saved.

Variable Speed Drive offers multiple advantages. At start sequence of combustion air fan the inrush current can be limited to a minimum. During operation, blower motor speed is controlled according to the required amount of combustion air. This saves electricity and reduces noise level.
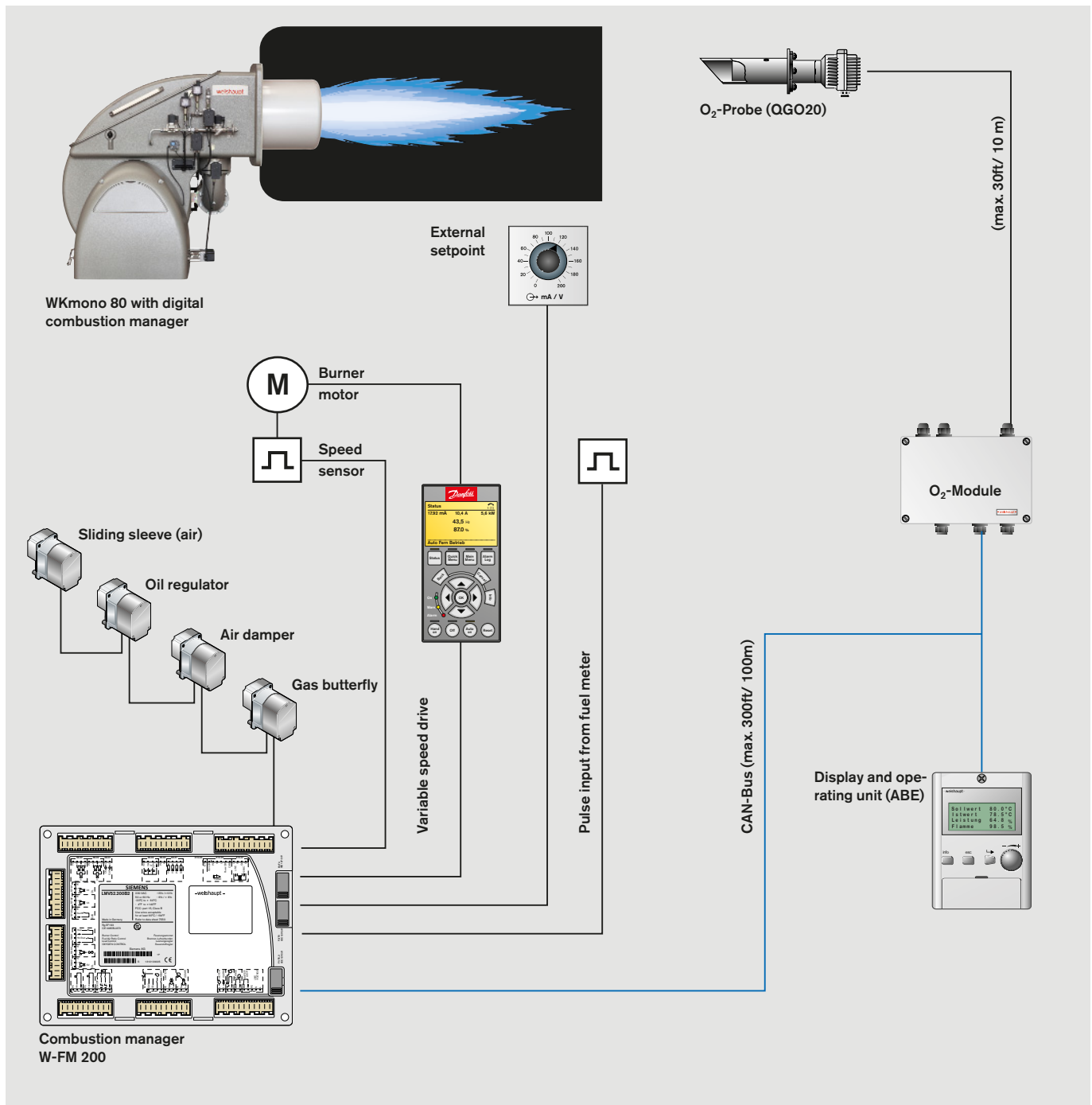
O_2-Control saves fuel cost by continously optimizing combustion air. As a basic for controlling is an O_2 probe mounted at flue gas stack which takes into account all parameters effected by O_2 changes.

Advantages of digital technology

Digital combustion management makes burner operation user friendly and reliable. The most important benefits are:

- No additional burner controls are required since this function is already taken care by the combustion manager. Fuses and eventually mains dis-connect switch are the only addi-tional items required.
- Less installation work means less errors: the burners are tested as a complete unit at the factory.
- Commissioning and service work take less time. The initial presetting of the burner is carried out at the factory. On site, only the site specific operating points have to be adjusted.

System overview Digital Combustion Management	W-FM 100	W-FM 200
Combustion manager for intermittent operation	●	●
Combustion manager for continuous operation	●	●
Flame sensor for intermittent operation	ION/QRI/QRB	ION/QRI/QRB
Flame sensor for continuous operation	ION/QRI/QRA73	ION/QRI/QRA73
Number of actuator (max.)	4 pcs	6 pcs
Actuator with stepping motor	●	●
Compatible with Variable Speed Drive operation		O
O_2-Trim (optional)		O
Single fuel operation	●	●
Dual fuel operation	●	●
Valve proving system for gas valves	●	●
Integrated self tuning PID-Modulating controller for Temperature or Pressure	●	●
Removable ABE control unit (max. distance)	325 ft (100 m)	325 ft (100 m)
Fuel meter interface		●
Combustion efficiency display (w/ optional sensor)		●
eBUS / MOD BUS interface	●	●
PC interface	●	●

● Standard   O Optional

O₂-Probe (QGO20)

WKmono 80 with digital combustion manager

External setpoint

Burner motor

M

Speed sensor

Sliding sleeve (air)

Oil regulator

Air damper

Gas butterfly

Variable speed drive

Pulse input from fuel meter

(max. 30ft/ 10 m)

O₂-Module

CAN-Bus (max. 300ft/ 100m)

Display and operating unit (ABE)

SIEMENS
LMV52.200B2
−weishaupt−

Combustion manager W-FM 200

Example with W-FM 200

Flexible Communication:
Compatible with Building Management System

Modbus Combustion
manager

Connectivities to building
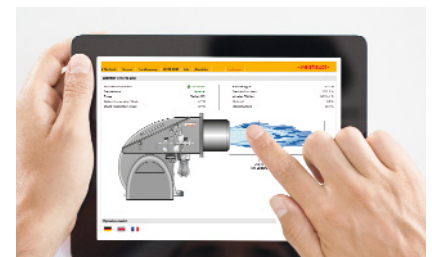management system

PROFI BUS

LON

Communication
via Internet
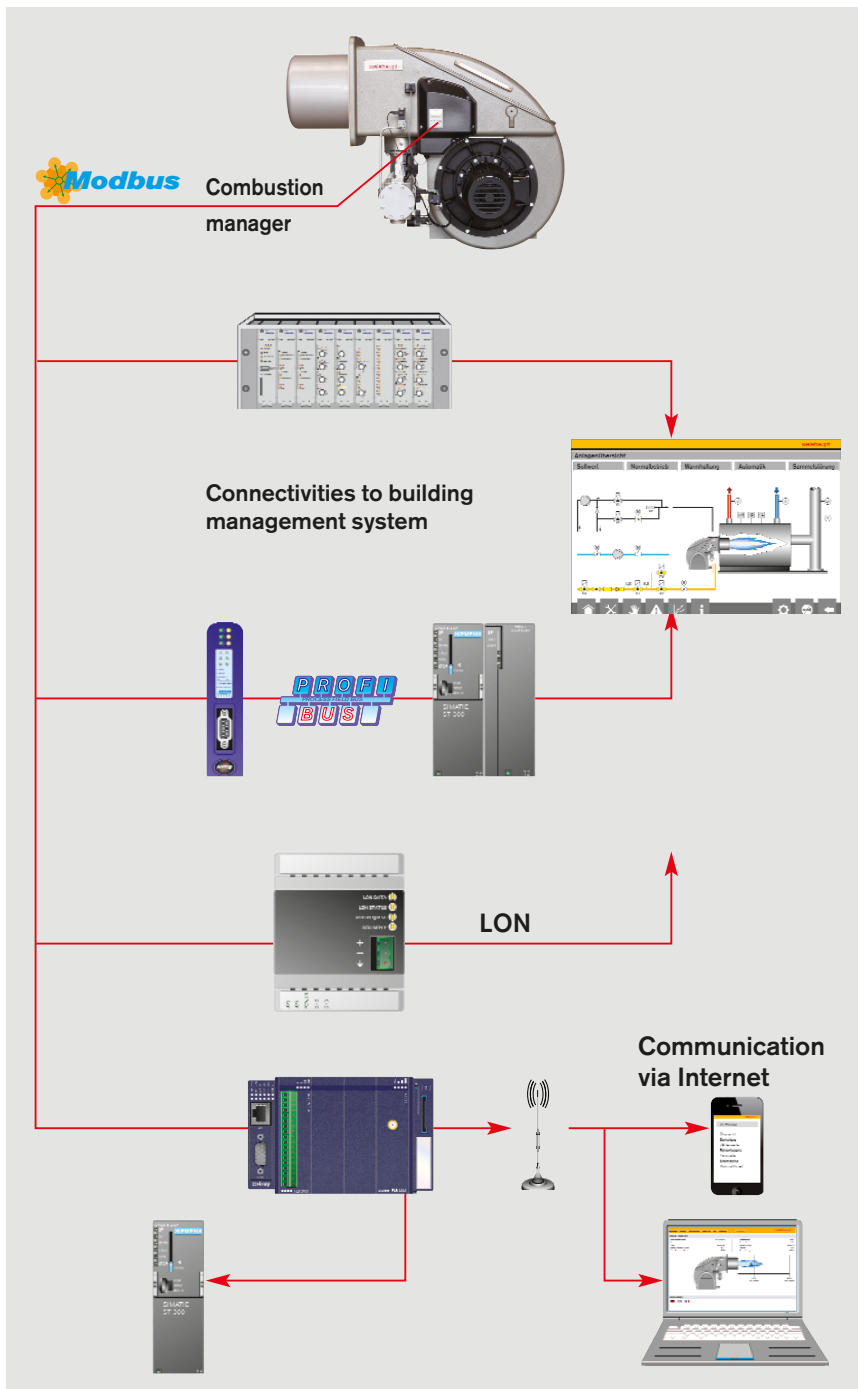
Digital combustion manager offers possibilities of communication with automation systems. In general Mod-BUS protocol is available for this purpose.

Direct communication with building automation system allows controlling and monitoring of burner and boiler functions.

Optionally available graphical touch screen offers convenience and good overview of the system. Various functions such system parameters, setpoints of one or multiple boilers as well as auxiliary devices can be adjusted and monitored.
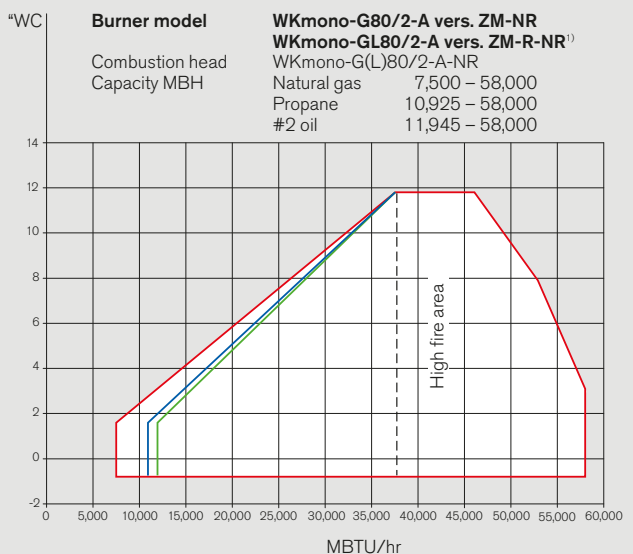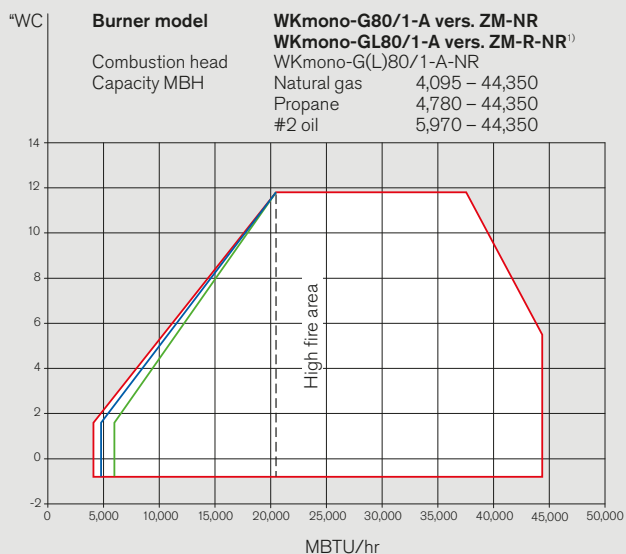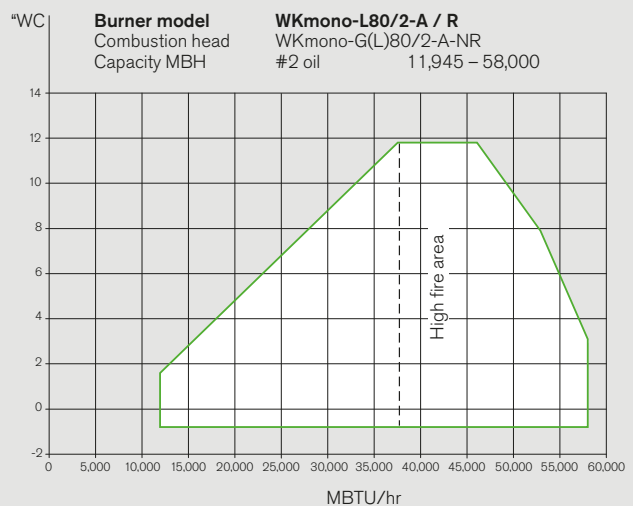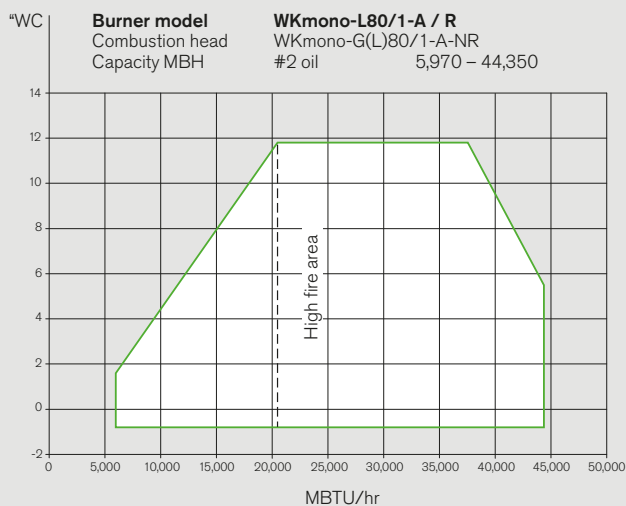
Gateways for various communication protocols such as Profibus, BacNet and LON are also available.

Access via Internet

Overview of operating modes
Burner's nomenclature

Operation with gas and oil

Sliding two stage
- Via 2 points signal
(e.g.: Thermostat / Pressostat) burner is driven to high fire or low fire depending on load requirements. Combustion values between high and low fire are CO and smoke free.

Modulation
- Modulating operation allows continuous control of firing rate based on load requirements.

sliding two stage

HF
LF
IGN
On   Off

modulating

HF
LF
IGN
On   Off

- Modulating operation:
  - W-FM 100 with integral load controller
  - W-FM 200

HF = High fire
LF   = Low fire
IGN = Ignition

Burner version	Gas		Oil	
	sliding two stage	modulating	sliding two stage	modulating
ZM-NR	●	●	–	–
R	–	–	●	●
ZM-R-NR	●	●	●	●
ZM-3LN	●	●	–	–
R-3LN	–	–	●	●
ZM-R-3LN	●	●	●	●

Nomenclature

WKmono – G L 80 / 1 – A / ZM – R – NR or   …3LN

multiflam®

NOₓ reduced (Gas)

Oil
sliding 2 stage/modulating

Gas
sliding 2 stage/modulating

Revision

Capacity

Size

G = Gas
L = #2 oil

Weishaupt WKmono series

Burner selection WKmono 80
Oil, gas and dual fuel burners version NR[1]

"WC	Burner model	WKmono-L80/1-A / R
	Combustion head	WKmono-G(L)80/1-A-NR
	Capacity MBH	#2 oil 5,970 – 44,350

MBTU/hr

"WC	Burner model	WKmono-L80/2-A / R
	Combustion head	WKmono-G(L)80/2-A-NR
	Capacity MBH	#2 oil 11,945 – 58,000

MBTU/hr

"WC	Burner model	WKmono-G80/1-A vers. ZM-NR
		WKmono-GL80/1-A vers. ZM-R-NR[1]
	Combustion head	WKmono-G(L)80/1-A-NR
	Capacity MBH	Natural gas 4,095 – 44,350
		Propane 4,780 – 44,350
		#2 oil 5,970 – 44,350

MBTU/hr

"WC	Burner model	WKmono-G80/2-A vers. ZM-NR
		WKmono-GL80/2-A vers. ZM-R-NR[1]
	Combustion head	WKmono-G(L)80/2-A-NR
	Capacity MBH	Natural gas 7,500 – 58,000
		Propane 10,925 – 58,000
		#2 oil 11,945 – 58,000

MBTU/hr

[1] Reduced NO_x is only in gas operation

■ Natural gas
■ Propane
■ #2 oil

Turndown ratio: Natural gas   max 1 : 7
Propane   max 1 : 5
#2 oil   max 1 : 4

The firing rates are based on an installation altitude of 0 ft (0 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration in case of installation altitude above 0 ft.

Standard scope of supply

Description	WKmono-L80, R	WKmono-G80, ZM-NR	WKmono-GL80, ZM-R-NR
Burner housing, hinged flange, housing cover, burner motor, air inlet housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, combustion manager with display and operating unit, flame sensor, actuators, flange gasket, mounting studs	●	●	●
Digital combustion manager W-FM 200	●	●	●
Variable frequency drive	●	●	●
Two main gas safety shut off valves	–	●	●
Gas butterfly valve	–	●	●
Air pressure switch	O	●	●
Low and high gas pressure switches	–	●	●
Modulating sliding sleeve	●	●	●
Actuators for electronic fuel air ratio controller W-FM: Air damper stepping motor Gas butterfly valve stepping motor Oil regulator stepping motor Sliding sleeve stepping motor	● – ● ●	● ● – ●	● ● ● ●
Oil pressure switch in supply and return lines	●	–	●
Burner mounted oil pump	–	–	–
Oil hoses	●	–	●
2 oil solenoid valves, oil regulator, nozzle head with solenoid valve, premounted spill type nozzle and safety shut-off device	●	–	●
IP 54 protection	●	●	●

● Standard
O Optional

Oil burners version R

Burner model	Version	Order No.
WKmono-L80/1-A	R	281 814 10
WKmono-L80/2-A	R	281 824 10

Dual fuel burners version ZM-R-NR

Burner model	Version	Order No.
WKmono-GL80/1-A	ZM-R-NR	288 814 16
WKmono-GL80/2-A	ZM-R-NR	288 824 16

Gas burners version ZM-NR

Burner model	Version	Order No.
WKmono-G80/1-A	ZM-NR	287 814 16
WKmono-G80/2-A	ZM-NR	287 824 16

Technical data WKmono 80
Oil, gas and dual fuel burners version ZM-(R)-NR

Fuel independent		WKmono 80/1-A	WKmono 80/2-A
Burner motor	model	AF 225M/2L - 24LS 45K0	AF 225M/2L - 24LS 45K0
Rated power	HP (kW)	60 (45)	60 (45)
Full load amps (FLA)	A	75	75
Motor fuse (Y∆ start)	A minimum	100A slow (external)	100A slow (external)
Speed	rpm	2,955[1]	2,955[1]
Combustion manager	model	W-FM 200	W-FM 200
Actuator for air damper Actuator for sliding sleeve	model model	SQM48 (177 in-lb/ 20 Nm) SQM48 (177 in-lb/ 20 Nm)	SQM48 (177 in-lb/ 20 Nm) SQM48 (177 in-lb/ 20 Nm)

#2 oil			WKmono 80/1-A version R	WKmono 80/2-A version R
Ignition unit		model	W-ZG02 (2 poles)	W-ZG02 (2 poles)
Flame sensor		model	QRI	QRI
Actuator for oil regulator		model	SQM48 (177 in-lb/ 20 Nm)	SQM48 (177 in-lb/ 20 Nm)
Weight		lbs/ kg	1,907/ 865	2,040/ 925
Oil solenoid valves	60V DN 20 (supply) 20 W 60V DN 20 (return) 20 W	model model	5406 NC 5407 NC	5406 NC 5407 NC

Gas		WKmono 80/1-A version ZM-NR	WKmono 80/2-A version ZM-NR
Ignition unit	model	W-ZG02 (2 poles)	W-ZG02 (2 poles)
Flame sensor	type	ION	ION
Actuator for gas butterfly	model	SQM45 (27 in-lb/ 3 Nm)	SQM45 (27 in-lb/ 3 Nm)
Weight (not including gas train)	lbs/ kg	1,840/ 835	1,973/ 895

[1] VFD is required

Dual fuel			WKmono 80/1-A vers. ZM-R-NR	WKmono 80/2-A vers. ZM-R-NR
Ignition unit		model	W-ZG03 (3 poles)	W-ZG02 (2 poles)
Flame sensor		model	QRI	QRI
Actuator for gas butterfly		model	SQM45 (27 in-lb/ 3 Nm)	SQM45 (27 in-lb/ 3 Nm)
Actuator for oil regulator		model	SQM48 (177 in-lb/ 20 Nm)	SQM48 (177 in-lb/ 20 Nm)
Weight (not including gas train)		lbs/ kg	1,907/ 865	2,040/ 925
Oil solenoid valves	60V DN 20 (supply) 20 W	model	5406 NC	5406 NC
	60V DN 20 (return) 20 W	model	5407 NC	5407 NC

Voltages and frequencies:
Different voltage and frequency are available upon request.

Standard burner motor:
Insulation class F, protection IP 55.

Oil function schematic

Version ZM-R-NR
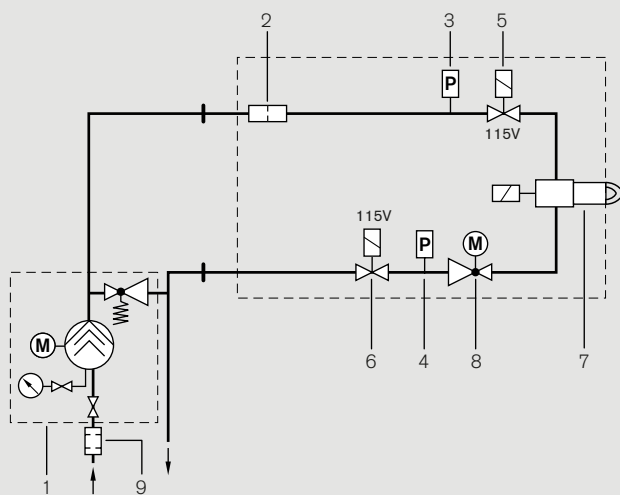
1 Remote oil pump station pressure regulator
2 Strainer
3 Low oil pressure switch
4 High oil pressure switch
5 Oil solenoid valve in supply line
6 Oil solenoid valve in return line
7 Nozzle head with solenoid valve
8 Oil regulator
9 Filter

Reducing emissions:
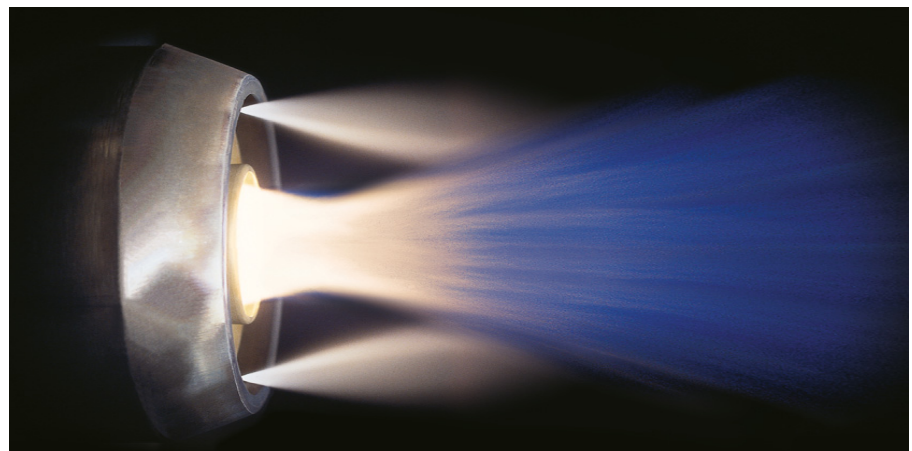# The multiflam® principle

The multiflam® principle developed and patented by Weishaupt is an innovative way of reducing NO_x emissions from combustion plant to a minimal level.

At the heart of Weishaupt's multiflam® technology lies a special mixing assembly design. Fuel is distributed among several nozzles and combusted in a primary and a secondary flame. Temperature in the flame's core is considerably reduced, resulting in an effective reduction of nitrogen oxides.

The wide range of ratings across which multiflam® burners are now available is equally outstanding. All the way from the WM 10 monarch® burner right up to the WK 80 industrial burner, there is now a multiflam® burner for outputs ranging from 4,095 up to 78,500 MBtu/hr.

NO_x [PPM]

Medium temperature 130–200 °C 265 - 390°F

Medium temperature ≤ 130 °C ≤ 265°F

| | Light oil | Propane | Nat. gas | Light oil | Propane | Nat. gas |
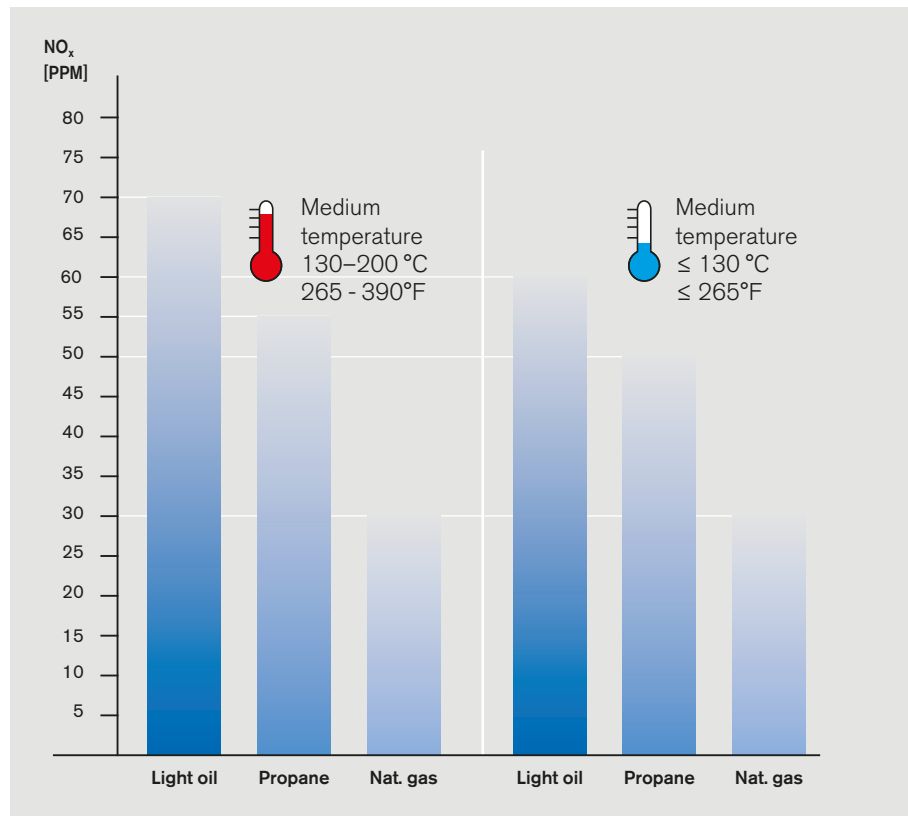
Typical NO_x emission values for WKmono 80-3LN on three pass boiler

WKmono 80 is also available in multiflam® version

secondary
gas nozzles

Primary oil nozzles

Secondary oil nozzles

Primary gas nozzles
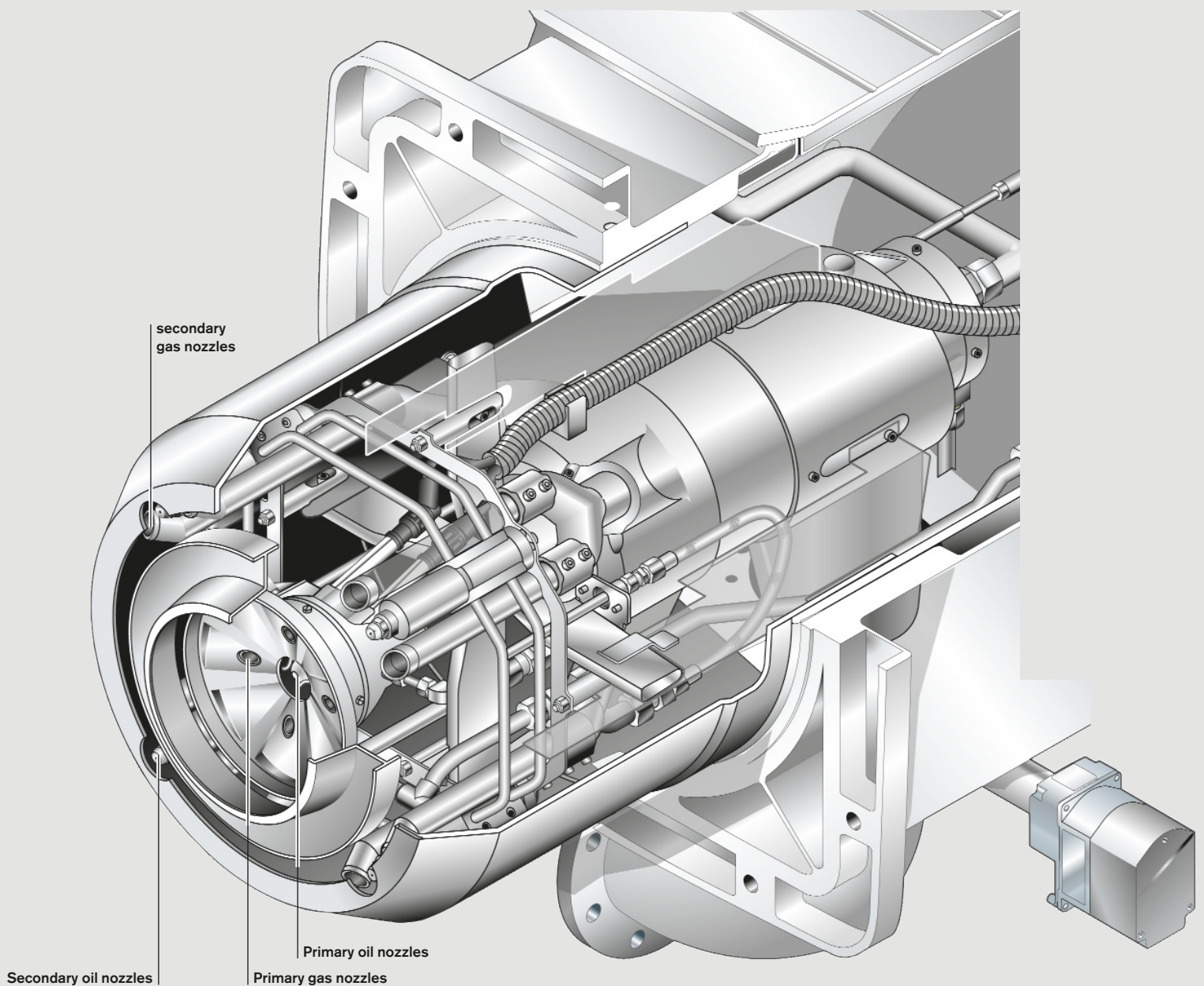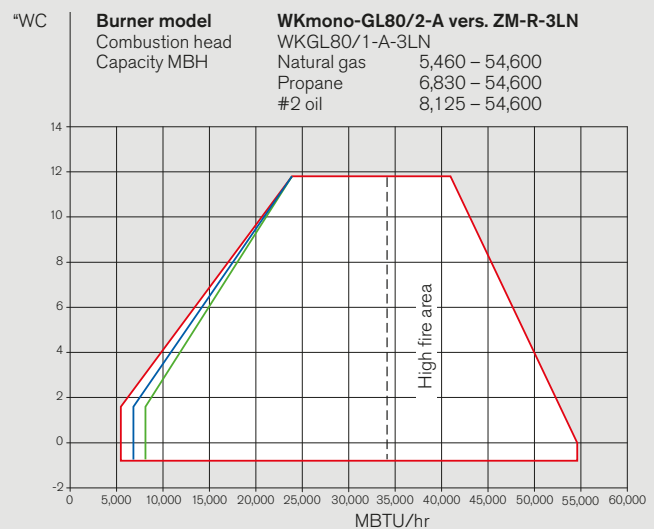
multiflam® mixing head of a WKmono 80 burner

Burner selection WKmono 80
Oil, gas and dual fuel burners version 3LN

Burner model WKmono-L80/2-A / R-3LN
Combustion head WKGL80/1-A-3LN
Capacity MBH #2 oil 8,125 – 54,600

"WC

High fire area

MBTU/hr

Burner model WKmono-G80/2-A vers. ZM-3LN
Combustion head WKG80/1-A-3LN
Capacity MBH Natural gas 5,460 – 58,000
Propane 6,830 – 58,000

"WC

High fire area

MBTU/hr

Burner model WKmono-GL80/2-A vers. ZM-R-3LN
Combustion head WKGL80/1-A-3LN
Capacity MBH Natural gas 5,460 – 54,600
Propane 6,830 – 54,600
#2 oil 8,125 – 54,600

"WC

High fire area

MBTU/hr

■ Natural gas
■ Propane
■ #2 oil

Turndown ratio: Natural gas max 1 : 10
Propane max 1 : 8
#2 oil max 1 : 5

The firing rates are based on an installation altitude of 0 ft (0 m). A reduction of burner capacity of 1 % for every 325 ft (100 m) should be taken into consideration in case of installation altitude above 0 ft.

Standard scope of supply

Description	WKmono-L80 vers. R-3LN	WKmono-G80 vers. ZM-3LN	WKmono-GL80 vers. ZM-R-3LN
Burner housing, hinged flange, housing cover, burner motor, air inlet housing, fan wheel, combustion head, ignition unit, ignition cable, ignition electrodes, combustion manager with display and operating unit, flame sensor, actuators, flange gasket, mounting studs	●	●	●
Digital combustion manager W-FM 200	●	●	●
Variable frequency drive	●	●	●
Two main gas safety shut off valves	–	●	●
Gas butterfly valve	–	●	●
Air pressure switch	O	●	●
Low and high gas pressure switches	–	●	●
Modulating sliding sleeve	●	●	●
Actuators for electronic fuel air ratio controller W-FM: Air damper stepping motor Gas butterfly valve stepping motor Oil regulator stepping motor Sliding sleeve stepping motor	● – ● ●	● ● – ●	● ● ● ●
Oil pressure switch in supply and return lines	●	–	●
Burner mounted oil pump	–	–	–
Oil hoses	●	–	●
2 oil solenoid valves, oil regulator, nozzle head with solenoid valve, premounted spill type nozzle and safety shut-off device	●	–	●
IP 54 protection	●	●	●

● Standard
O Optional

Oil burner version 3LN multiflam®

Burner model	Version	Order No.
WKmono-L80/2-A	R-3LN	281 824 20

Gas burner version 3LN multiflam®

Burner model	Version	Order No.
WKmono-G80/2-A		287 824 26

Dual fuel burner version 3LN multiflam®

Burner model	Version	Order No.
WKmono-GL80/2-A	ZM-R-3LN	288 824 26

Technical data WKmono 80
Oil, gas and dual fuel burners multiflam® 3LN

General		WKmono 80/2-A
Burner motor	model	AF 225M/2L - 24LS 45K0
Rated power	HP (kW)	60 (45)
Full load amps (FLA)	A	75
Motor fuse (Y∆ start)	A minimum	100A slow (external)
Speed	rpm	2,955 [1]
Combustion manager	model	W-FM 200
Actuator for air damper	model	SQM48 (177 in-lb/ 20 Nm)
Actuator for sliding sleeve	model	SQM48 (177 in-lb/ 20 Nm)

#2 oil			version R-3LN
Ignition unit		model	W-ZG02 (2 poles)
Flame sensor		model	QRA73
Actuator for oil regulator		model	SQM48 (177 in-lb/ 20 Nm)
Weight		lbs/ kg	2,040/ 925
Oil solenoid valves	60V DN 20 (supply) 20 W	model	5406 NC
	60V DN 20 (return) 20 W	model	5407 NC

Gas		version ZM-3LN
Ignition unit	model	W-ZG02 (2 poles)
Flame sensor	type	ION
Actuator for gas butterfly	model	SQM45 (27 in-lb/ 3 Nm)
Weight (not including gas train)	lbs/ kg	1,973/ 895

[1] VFD is required

Dual fuel			version ZM-R-3LN
Ignition unit		model	W-ZG02 (2 poles)
Flame sensor		model	QRA73
Actuator for gas butterfly		model	SQM45 (27 in-lb/ 3 Nm)
Actuator for oil regulator		model	SQM48 (177 in-lb/ 20 Nm)
Weight (not including gas train)		lbs/ kg	2,040/ 925
Oil solenoid valves	60V DN 20 (supply) 20 W	model	5406 NC
	60V DN 20 (return) 20 W	model	5407 NC

Voltages and frequencies:
Different voltage and frequency are available upon request.

Standard burner motor:
Insulation class F, protection IP 55.

Oil function schematic

Version 3LN
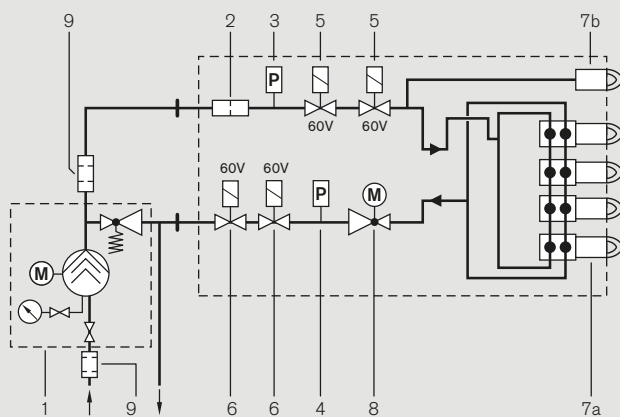
1 Remote oil pump station pressure regulator
2 Strainer
3 Low oil pressure switch
4 High oil pressure switch
5 Oil solenoid valve in supply line
6 Oil solenoid valve in return line
7a Hydraulic nozzle head with
   secondary nozzles
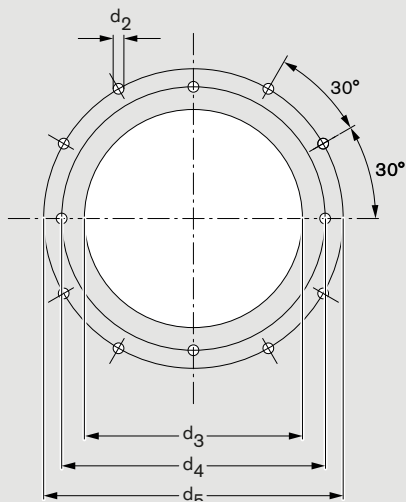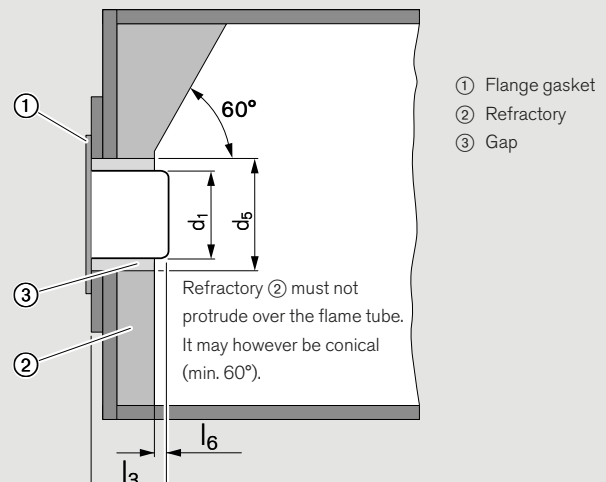7b Nozzle head with primary nozzle
8 Oil regulator
9 Filter

Dimensions

Burner model WKmono	Dimensions in inches and (mm)												
	l_1	l_2	l_3	l_4	l_5	l_6	b_1	b_2	b_3	h_1	h_2	h_3	h_4
L80/1-A / R	64.4 (1635)	24.2 (615)	16.7 (425)	35.4 (900)	14.5 (368)	≥ 0	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
L80/2-A / R	64.4 (1635)	24.2 (615)	19.7 (500)	35.4 (900)	14.5 (368)	≥ 0	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
G80/1-A vers. ZM-NR	64.4 (1635)	24.2 (615)	16.7 (425)	35.4 (900)	14.5 (368)	≥ 0	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
G80/2-A vers. ZM-NR	64.4 (1635)	24.2 (615)	19.7 (500)	35.4 (900)	14.5 (368)	≥ 0	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
GL80/1-A vers. ZM-R-NR	64.4 (1635)	24.2 (615)	16.7 (425)	35.4 (900)	14.5 (368)	≥ 0	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
GL80/2-A vers. ZM-R-NR	64.4 (1635)	24.2 (615)	19.7 (500)	35.4 (900)	14.5 (368)	≥ 0	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
L80/2-A / R-3LN	64.4 (1635)	24.2 (615)	20.1 (510)	35.4 (900)	14.5 (368)	≥ 70	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
G80/2-A vers. ZM-3LN	64.4 (1635)	24.2 (615)	20.1 (510)	35.4 (900)	14.5 (368)	≥ 70	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)
GL80/2-A vers. ZM-R-3LN	64.4 (1635)	24.2 (615)	20.1 (510)	35.4 (900)	14.5 (368)	≥ 70	68.2 (1732)	36.4 (925)	21.4 (543)	65.4 (1661)	20.3 (515)	48.7 (1236)	18.0 (456)

All dimensions are approximate only. Weishaupt reserves the right to make changes in light of future developments.

Boiler plate mounting dimensions

Mounting to heat exchanger

① Flange gasket
② Refractory
③ Gap

Refractory ② must not protrude over the flame tube. It may however be conical (min. 60°).

Burner model WKmono	Dimensions in inches and (mm)						Diameter Gas butterfly
	h_5	d_1	d_2	d_3	d_4	d_5	
L80/1-A / R	33.5 (850	19.1 (485)	M16	33.5 (530)	33.5 (770)	33.5 (875)	–
L80/2-A / R	33.5 (850	23.2 (590)	M16	25.2 (640)	30.3 (770)	34.4 (875)	–
G80/1-A vers. ZM-NR	33.5 (850	19.1 (485)	M16	20.9 (530)	30.3 (770)	34.4 (875)	DN150
G80/2-A vers. ZM-NR	23.2 (850	23.2 (590)	M16	25.2 (640)	30.3 (770)	34.4 (875)	DN150
GL80/1-A vers. ZM-R-NR	33.5 (850	19.1 (485)	M16	20.9 (530)	30.3 (770)	34.4 (875)	DN150
GL80/2-A vers. ZM-R-NR	33.5 (850)	23.2 (590)	M16	25.2 (640)	30.3 (770)	34.4 (875)	DN150
L80/2-A / R-3LN	33.5 (850)	21.3 (540)	M16	25.2 (640)	30.3 (770)	34.4 (875)	–
G80/2-A vers. ZM-3LN	23.2 (850)	21.3 (540)	M16	25.2 (640)	30.3 (770)	34.4 (875)	DN150
GL80/2-A vers. ZM-R-3LN	33.5 (850)	21.3 (540)	M16	25.2 (640)	30.3 (770)	34.4 (875)	DN150

All dimensions are approximate only. Weishaupt reserves the right to make changes in light of future developments.

Weishaupt Headquarter in Schwendi, Germany

Administration, burner manufacturing and R&D facility at Weishaupt headquarter in Schwendi

Research and development center

WKmono 80 during testing

Burner with firing rate above 100,000 MBH can be tested and fired at Weishaupt testing facility

–weishaupt–

–weishaupt–

Gasbrenner
Ölbrenner

Regular maintenance reduces heating costs and environmental pollution. Only a properly adjusted burner can save energy and be environmentally friendly. Behind each Weishaupt burner stands the whole Weishaupt customer service organization. The outstanding efforts made in maintenance and service justify the enormous trust placed in Weishaupt's burners, for at Weishaupt, product and customer service belong together.
Weishaupt customer service is there for you all year round. Whenever you need help, be it the supply of spare parts, technical advice or a site visit. We are there when you need us.