

Weishaupt gas burners type G Gas/oil dual fuel burners types GL and RGL Sizes 1 and 3

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Description

Weishaupt G, GL and RGL gas and dual fuel burners satisfy the requirements for operational safety, simple installation and reliability. The oil side of the dual fuel burners complies with EN 267. The gas burners and the gas side of the dual fuel burners comply with EN 676 and the Gas Appliance Directive (90/396/EEC). They are CE type tested.

The burners distinguish themselves through a variety of interesting features.

- Large capacity and range of application
- Automatic sequence of operations
- Combustion chamber pre-purge
- Safe flame monitoring
- Stable fan characteristics - good combustion results
- Air regulation on pressure side
- Quiet operation
- Hinged burner casing
- Simple installation, adjustment and servicing as components are easily accessible
- Easily converted to other types of gas
- Fuel change on the dual fuel burner is carried out by means of a manual or automatic change over. Conversion work is not necessary
- Automatic air closure on burner shutdown

Construction

The burner is of monobloc construction. The burner motor drives the fan and the fuel pump (on dual fuel burners). All the equipment used for the regulation of fuel and air is arranged clearly and is easily accessible. The burners can be hinged to left or right. This simplifies work on the combustion head, diffuser, nozzles and electrodes.

Fuels

Oil side (Fuel oil to DIN 51603):
Light oil EL, maximum viscosity 6 mm²/s at 20°C

Gas side (DVGW worksheet G260):
Natural gas E (formerly designated: H)
Natural gas LL (formerly designated: L)
Liquid petroleum gas F

Other gas types and fuels on application..

Application

The burners can be used on heating appliances such as hot water boilers, steam boilers, air heaters and for certain heating processes. The burners are used in particular on modern boilers with high ratings as they can overcome high combustion chamber pressures.

Regulation

Regulation takes place according to burner size and requirements:

- Two stage Z
- Sliding two stage ZM
- Modulating (the standard sliding two stage ZM burner with a 42 s runtime servomotor can modulate by fitting a suitable controller). Burner size 3 only with oil.

Two stage Z burners are fitted with a fast acting servomotor (8 s runtime) which gives rapid control of throughput. The air damper and gas control valve are operated simultaneously by means of a cam arrangement. The simultaneous operation of gas and air ensures that start and change over impacts in the combustion chamber and gas system are small.

Sliding two stage ZM and modulating burners operate with slower capacity regulation. The air damper and gas control valve are operated simultaneously by means of a regulating cam. The servomotor runtime for capacity alteration is a maximum 20 or 42 s.

For sliding two stage regulation, partial and full load are fixed within the range of regulation. The burner moves gradually between the two set points according to appliance demand. There are no rapid changes of fuel throughput.

Modulating burners operate at any point within the burner range, depending on the heat requirement.

Ignition phase for gas operation

The burner starts at ignition load, during which time only a small quantity of gas flows through the gas butterfly valve into the combustion chamber. After a timed delay gas is released for the main flame.

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Controlled shutdown at partial load

The regulator and the set point of the second stage enable the burner to shut down in the partial load position. This avoids pressure surges in the gas system on controlled shut down.

Flame supervision

The burner controller which is fitted in the control panel or mounted on the burner sequences the operation automatically. The burner controller monitors the flame and its stability with a flame sensor. On gas burners the flame sensor works on the ionisation principle and on dual fuel burners a UV cell is used.

Electromagnetic clutch on dual fuel burners (at extra cost)

during gas operation the mechanical connection between the oil pump and burner motor is automatically disconnected. The pump is thus saved from unnecessary wear and tear.

Valve trains

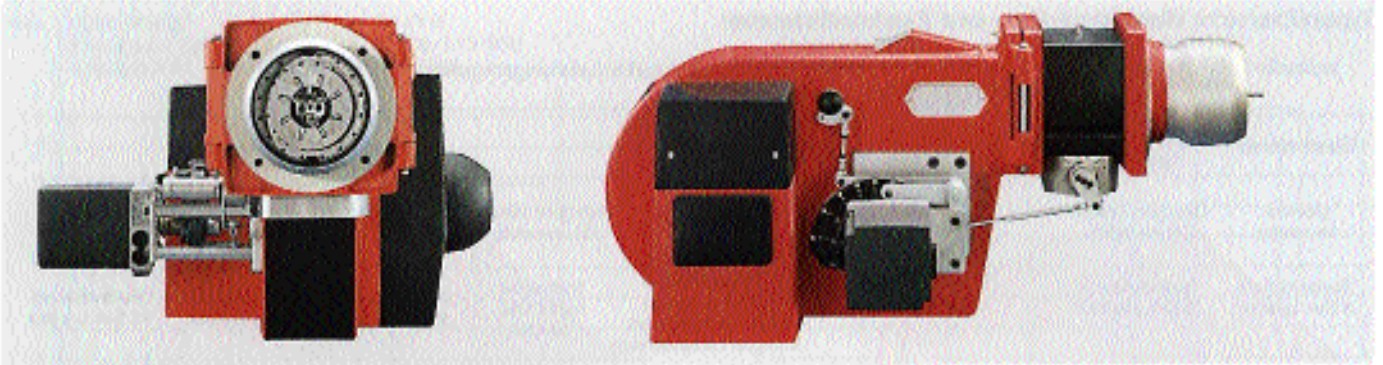
in accordance with EN 676, burners must be fitted with two solenoid valves. Weishaupt gas and dual fuel burners are supplied as standard with two Class A solenoid valves (DMV double solenoid valve). Weishaupt also recommends the use of valve proving equipment, and it is required by EN 676 for ratings from 1200 kW. This equipment as well as other gas fittings, such as filters and governors, can be found in our accessories list.

Conversion to other types of gas

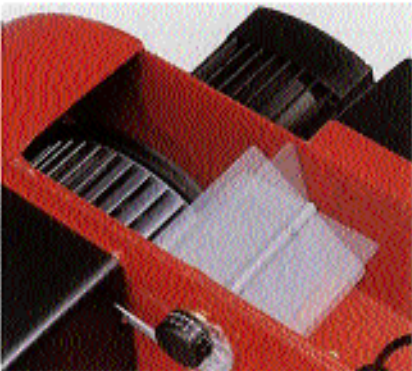
The design of Weishaupt gas and dual fuel burners is the same for natural gas and LPG. When converting the gas supply, e.g. to natural gas, only recommissioning is required.

Suitable installations

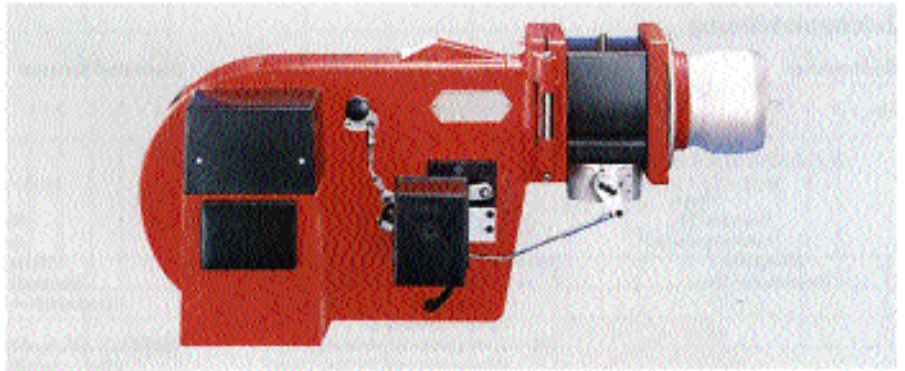
Burners in standard execution (material, construction and type of protection) are designed for operation indoors in temperatures of –15° C to +40° C (details on oil operation in sub-zero temperatures and outdoor installations available on application).



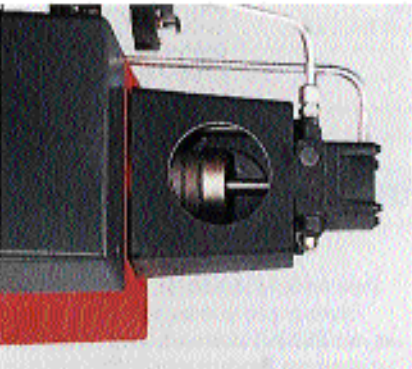
Gas burner type G, sliding two stage / modulating version ZM



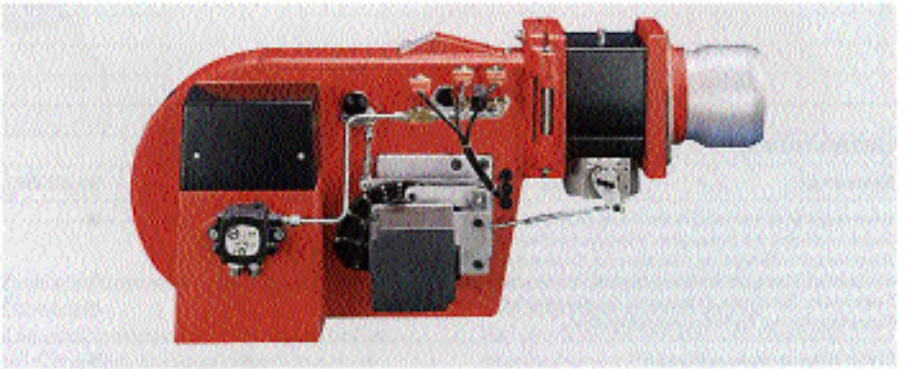
Pressure side air regulation



Gas burner type G, two stage version Z



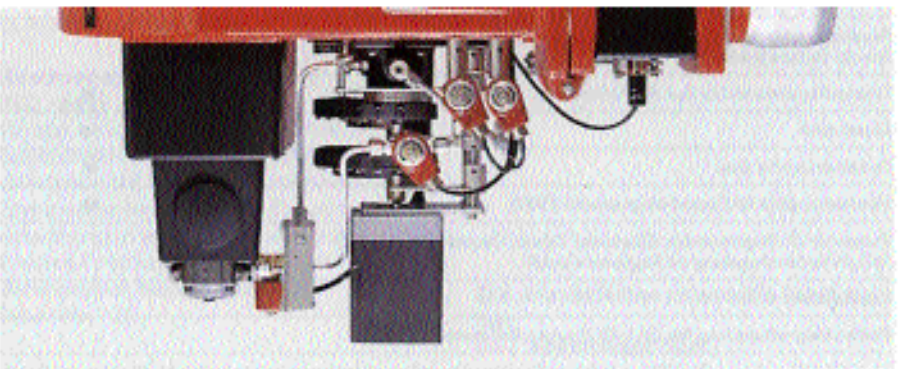
Electromagnetic clutch



Dual fuel burner type GL, sliding two stage / modulating version ZM



Gas burner type G with integral switchgear



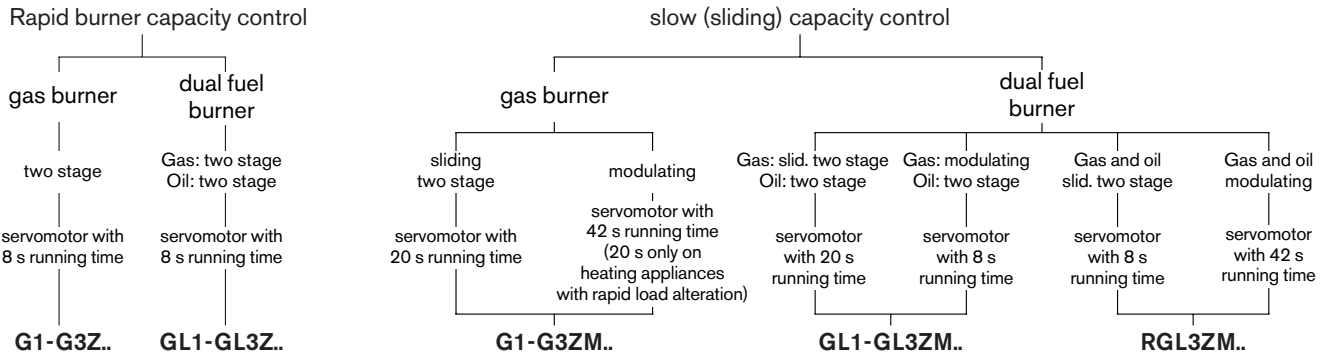
Regulating drive dual fuel burner RGL: gas and oil side sliding two stage ZM

Model overview

Scope of delivery

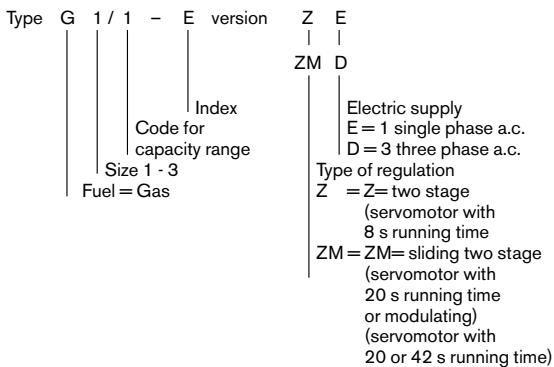
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Model overview Weishaupt gas and dual fuel burners

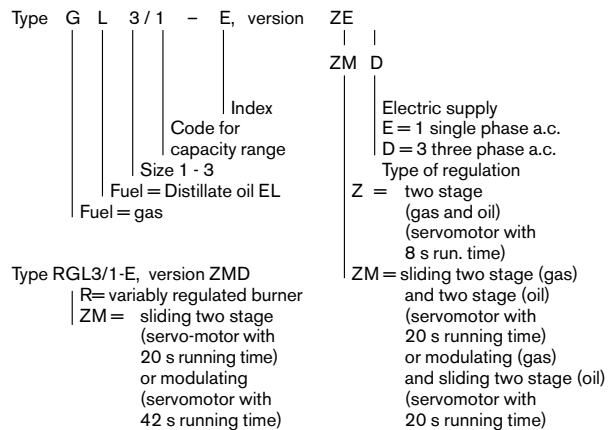


Explanations of symbols

Gas burner



Dual fuel burner



Included in delivery

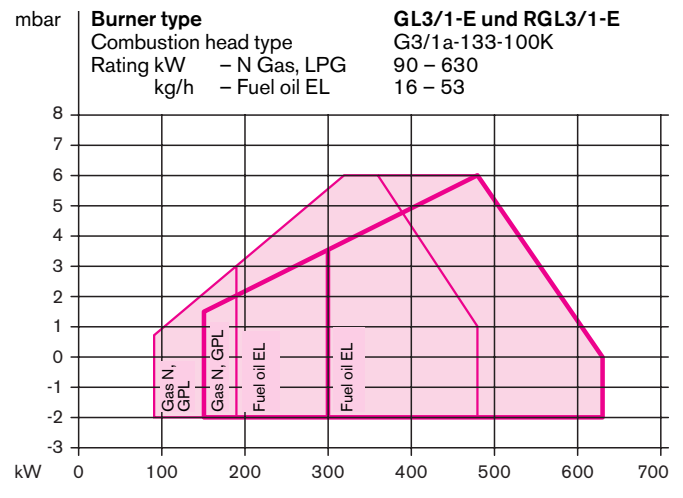
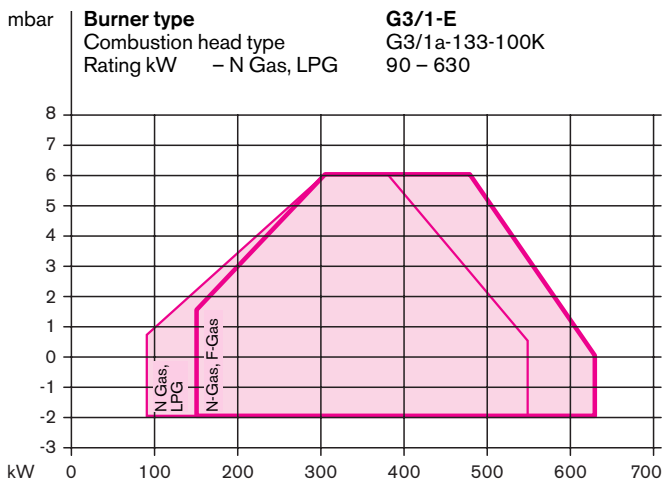
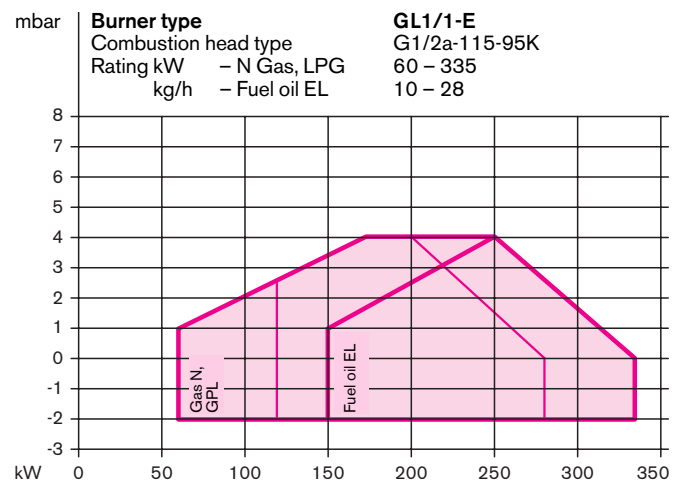
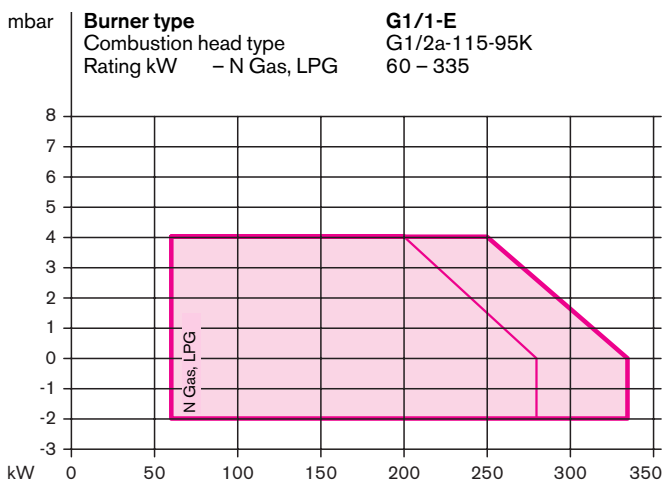
Burner type	G1-G3Z	G1-G3ZM	GL1-GL3Z	GL1-GL3ZM	RGL3
Burner casing with integral air intake guide, hinged flange, casing cover with sight glass, Weishaupt burner motor, air regulation pressure side, fan, air pressure switch, servomotor, gas/air compound regulation with regulating cam(s), combustion head, ignition transformer, ignition cable, ignition electrodes, terminal strip, flange gasket, fixing screws	●	●	●	●	●
Hinge interlock switch	●	●	●	●	●
Burner control with flame sensor (ionisation electrode) loose for fitting into control panel or mounted on burner		●	●		
Burner control with flame sensor (UV cell) loose for fitting into control panel			●	●	●
Doubled solenoid for gas (DMV), class A	●	●	●	●	●
Gas butterfly valve	●	●	●	●	●
Gas pressure switch	●	●	●	●	●
Valve connection piece	●	●	●	●	●
Oil pump, solenoid valves, nozzle head, nozzles, oil hoses, oil/air compound regulation with regulating cam(s)			●	●	●
Oil pressure switch					●
Electromagnetic clutch (on GL1-GL3 at extra price)					●

In accordance with EN 676 gas filters and gas pressure regulators are part of the burner equipment (see Weishaupt accessories list).

Gas and dual fuel burner selection

Capacity / combustion chamber resistance

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Capacity charts in accordance with EN 676.

The ratings are referenced to an installation altitude of 500 m. For altitudes above 500 m, capacity is reduced by approximately 1% per 100 m

Dual fuel burners - oil throughput on oil operation

The oil throughput information is based on a calorific value of 11.91 kW/kg for light oil EL.

Dual fuel burners - turndown ratio for oil operation

Dual fuel burners with spill type nozzles have a maximum turn down ratio on oil operation of approx 1:3. It should be ensured that the lower operating point also lies within the capacity graph.

LN version gas burners

LN version G1 and G3 burners have particularly low emissions and thus can comply with stringent environmental requirements. More information about these burners can be found in brochure print No. 129 GB.

Gas and dual fuel burners - operation with towns gas or sewage gas

When selecting burners, the given burner ratings within the range of the capacity graphs must be reduced by 10% for towns gas or sewage gas.

The capacity graphs show the rating with:

- Combustion head 'open'
- Combustion head 'closed'

Valve train selection

Versions available

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Size 1

Rating	Low pressure supply (gas pressure into isolating valve, $p_{e,max} = 300$ mbar)					High pressure supply (gas pressure mbar into double solenoid valve)				
	Size of valve train					Size of valve train				
[kW]	3/4"	1"	40*	50*	65	3/4"	1"	40*	50*	65
	Size of butterfly valve					Size of butterfly valve				
	25	25	25	25	25	25	25	25	25	25
Natural gas E , $H_i = 37.26$ MJ/mn ³ (10.35 kWh/mn ³), $d = 0.606$, $W_i = 47.84$ MJ/mn ³										
150	14	–	–	–	–	7	–	–	–	–
200	21	10	–	–	–	11	–	–	–	–
220	25	11	–	–	–	13	–	–	–	–
250	31	13	8	–	–	16	6	–	–	–
280	37	15	9	8	–	20	7	5	5	–
300	42	17	10	9	–	23	7	6	6	5
320	47	18	11	9	8	25	8	6	6	5
340	52	20	12	10	9	28	9	7	6	6
Natural gas LL , $H_i = 31.79$ MJ/mn ³ (8.83 kWh/mn ³), $d = 0.641$, $W_i = 39.67$ MJ/mn ³										
150	18	9	–	–	–	9	–	–	–	–
200	28	12	–	–	–	15	5	–	–	–
220	33	14	9	–	–	18	6	–	–	–
250	42	16	10	8	–	22	7	5	5	–
280	51	19	11	9	8	27	8	6	6	5
300	58	22	12	10	9	31	9	7	6	6
320	65	24	13	10	9	35	10	7	7	6
340	73	26	14	11	9	39	11	8	7	6
Liquid gas B/P , $H_i = 93.20$ MJ/mn ³ (25.89 kWh/mn ³), $d = 1.555$, $W_i = 74.73$ MJ/mn ³										
150	–	–	–	–	–	–	–	–	–	–
200	11	–	–	–	–	6	–	–	–	–
220	13	–	–	–	–	7	–	–	–	–
250	16	8	–	–	–	8	–	–	–	–
280	18	9	–	–	–	10	–	–	–	–
300	20	10	–	–	–	11	–	–	–	–
320	23	11	–	–	–	12	5	–	–	–
340	25	12	8	–	–	14	6	–	–	–

Size 3

Rating	Low pressure supply (gas pressure into isolating valve, $p_{e,max} = 300$ mbar)						High pressure supply (gas pressure mbar into double solenoid valve)					
	Size of valve train						Size of valve train					
[kW]	3/4"	1"	40*	50*	65	80	3/4"	1"	40*	50*	65	80
	Size of butterfly valve						Size of butterfly valve					
	25	25	40	40	40	40	25	25	40	40	40	40
Natural gas E , $H_i = 37.26$ MJ/mn ³ (10.35 kWh/mn ³), $d = 0.606$, $W_i = 4.84$ MJ/mn ³												
300	41	16	9	–	–	–	22	6	–	–	–	–
350	54	20	10	8	–	–	29	8	5	–	–	–
400	69	25	12	9	–	–	37	10	6	6	–	–
450	86	30	14	11	9	–	46	12	7	7	6	5
500	105	36	16	12	9	9	56	14	8	8	6	6
550	126	42	18	13	10	9	68	17	9	9	7	6
600	149	49	21	15	11	10	80	19	10	10	8	7
650	174	56	23	16	12	11	93	22	11	11	9	8
Natural gas LL , $H_i = 31.79$ MJ/mn ³ (8.83 kWh/mn ³), $d = 0.641$, $W_i = 39.67$ MJ/mn ³												
300	57	21	10	8	–	–	30	8	–	–	–	–
350	76	26	12	10	–	–	40	10	6	6	–	–
400	98	33	15	11	9	–	52	13	7	7	6	5
450	123	40	18	13	10	9	65	16	8	8	6	6
500	150	49	20	14	11	9	80	19	10	9	7	6
550	181	58	23	16	12	10	96	22	11	10	8	7
600	214	68	27	18	13	11	114	26	13	12	9	8
650	250	78	30	20	14	12	133	29	14	13	10	9
Liquid gas B/P , $H_i = 93.20$ MJ/mn ³ (25.89 kWh/mn ³), $d = 1.555$, $W_i = 74.73$ MJ/mn ³												
300	19	9	–	–	–	–	10	–	–	–	–	–
350	25	11	–	–	–	–	13	–	–	–	–	–
400	32	13	8	–	–	–	17	6	–	–	–	–
450	39	16	9	–	–	–	21	7	–	–	–	–
500	47	19	11	9	–	–	26	8	6	6	5	–
550	56	21	12	10	8	8	30	40	6	6	6	5
600	66	25	13	11	9	9	36	11	7	7	6	6
650	76	28	14	12	10	9	42	12	8	8	7	7

* The figures for DN 40 and DN 50 are suitable for 1 1/2" and 2" respectively.

Version with inbuilt terminal strip

All electrical components must be fitted into a separate control panel on the burner version with inbuilt terminal strip. The burner controller can however be mounted on the burner if required (see additional price page 8). The electrical components on the burner are wired to the connection terminal.

Included in delivery:

1 terminal strip

Version with fully integral switchgear (at extra cost)

The burner version with integral switchgear contains all components required for burner operation. The motor and control fuses which serve the line fusing should be provided by others.

Included in delivery:

1 control switch, stage 1 with operating lamp
1 control switch, stage 2
1 contactor
1 overload relay (three phase only)
1 auxiliary contactor
1 connection terminal strip
Hours counter on request.

Please note:

Twin flue boilers in combination with gas and dual fuel burners can only be operated without faults, if the flue gas ducting for each burner is separate.

Notice on regulations

For installations which fall under the guidelines for steam boilers, please see the leaflet "Weishaupt burners on steam and hot water boilers, print No. 863.

The combustion chamber pressure in mbar must be added to the minimum gas pressure determined.

For selection of valve trains for town gas, see separate work sheet Print No. 900.

Pressure regulators to EN 88 with safety diaphragm are used for low pressure supply with double solenoid valves (DMV). Maximum permitted connection pressure into isolating valve on low pressure installations is 300 mbar.

For high pressure supply up to 4 bar, high pressure regulators to DIN 3380 can be selected from the technical leaflet "Pressure regulating and safety assemblies for Weishaupt gas and dual fuel burners".

Gas burners type G and dual fuel burners types GL and RGL

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DMV valve trains BSP/DN	Gas and dual fuel burners Order No.
Gas burners, Size 1	
Type G1/1-E, Version ZE	
3/4"	251 103 91
1"	251 113 91
1 1/2"	251 113 92
2"	251 113 93
40	251 123 91
50	251 133 91
65	251 143 91
80	251 153 91
Type G1/1-E, Version ZD	
3/4"	251 104 91
1"	251 114 91
1 1/2"	251 114 92
2"	251 114 93
40	251 124 91
50	251 134 91
65	251 144 91
80	251 154 91
Type G1/1-E, Version ZME	
3/4"	251 106 81
1"	251 116 81
1 1/2"	251 116 84
2"	251 116 85
40	251 126 81
50	251 136 81
65	251 146 81
80	251 156 81
Type G1/1-E, Version ZMD	
3/4"	251 107 81
1"	251 117 81
1 1/2"	251 117 84
2"	251 117 85
40	251 127 81
50	251 137 81
65	251 147 81
80	251 157 81
Size 3	
Type G3/1-E, Version ZE	
3/4"	251 303 91
1"	251 313 91
1 1/2"	251 313 92
2"	251 313 93
40	251 323 91
50	251 333 91
65	251 343 91
80	251 353 91
100	251 363 91
Type G3/1-E, Version ZD	
3/4"	251 304 91
1"	251 314 91
1 1/2"	251 314 92
2"	251 314 93
40	251 324 91
50	251 334 91
65	251 344 91
80	251 354 91
100	251 364 91

DMV valve trains BSP/DN	Gas and dual fuel burners Order No.
Type G3/1-E, version ZME	
3/4"	251 306 81
1"	251 316 81
1 1/2"	251 316 84
2"	251 316 85
40	251 326 81
50	251 336 81
65	251 346 81
80	251 356 81
100	251 366 81
Type G3/1-E, version ZMD	
3/4"	251 307 81
1"	251 317 81
1 1/2"	251 317 84
2"	251 317 85
40	251 327 81
50	251 337 81
65	251 347 81
80	251 357 81
100	251 367 81
Dual fuel burners, Size 1	
Type GL1/1-E, version ZE	
3/4"	255 103 91
1"	255 113 91
1 1/2"	255 113 92
2"	255 113 93
40	255 123 91
50	255 133 91
65	255 143 91
80	255 153 91
Type GL1/1-E, version ZD	
3/4"	255 104 91
1"	255 114 91
1 1/2"	255 114 92
2"	255 114 93
40	255 124 91
50	255 134 91
65	255 144 91
80	255 154 91
Type GL1/1-E, version ZME	
3/4"	255 106 81
1"	255 116 81
1 1/2"	255 116 82
2"	255 116 83
40	255 126 81
50	255 136 81
65	255 146 81
80	255 156 81
Type GL1/1-E, version ZMD	
3/4"	255 107 81
1"	255 117 81
1 1/2"	255 117 82
2"	255 117 83
40	255 127 81
50	255 137 81
65	255 147 81
80	255 157 81

DMV valve trains BSP/DN	Gas and dual fuel burners Order No.)
Size 3	
Type GL3/1-E, version ZE	
3/4"	255 303 91
1"	255 313 91
1 1/2"	255 313 92
2"	255 313 93
40	255 323 91
50	255 333 91
65	255 343 91
80	255 353 91
100	255 363 91
Type GL3/1-E, version ZD	
3/4"	255 304 91
1"	255 314 91
1 1/2"	255 314 92
2"	255 314 93
40	255 324 91
50	255 334 91
65	255 344 91
80	255 354 91
100	255 364 91
Type GL3/1-E, version ZME	
3/4"	255 306 81
1"	255 316 81
1 1/2"	255 316 82
2"	255 316 83
40	255 326 81
50	255 336 81
65	255 346 81
80	255 356 81
100	255 366 81
Type GL3/1-E, version ZMD	
3/4"	255 307 81
1"	255 317 81
1 1/2"	255 317 82
2"	255 317 83
40	255 327 81
50	255 337 81
65	255 347 81
80	255 357 81
100	255 367 81
Type RGL3/1-E, version ZME	
3/4"	756 306 81
1"	756 316 81
1 1/2"	756 316 82
2"	756 316 83
40	756 326 81
50	756 336 81
65	756 346 81
80	756 356 81
100	756 366 81
Type RGL3/1-E, version ZMD	
3/4"	756 307 81
1"	756 317 81
1 1/2"	756 317 82
2"	756 317 83
40	756 327 81
50	756 337 81
65	756 347 81
80	756 357 81
100	756 367 81

Important Note

If sliding two stage burners (ZM) are used as modulating burners, this should be indicated on the order. The running times of the servomotors for compound regulation are different on these two versions (see page 4).

Special Equipment

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No.	Description		G1/GL1 Order No.	G3/GL3/RGL3 Order No.	
Additional Prices					
1	Burner flange switch		standard	standard	
2	Downward firing version		standard	standard	
3	Connection flange for air supply duct.		210 000 67	210 000 67	
4	Oil hoses 1300 instead of 1000 mm long	GL/RGL	210 003 00	210 003 00	
5	Pressure gauge with isolating valve	GL (oil side) RGL (oil side)	110 006 63 –	110 006 63 210 000 92	
6	Vacuum gauge with isolating valve	GL/RGL (oil side)	110 006 64	110 006 64	
7	Oil meter fitted	GL	250 000 23	250 002 65	
8	Combustion head extension	G1–G3	100 mm	150 001 23	150 001 07
			200 mm	150 001 24	150 001 08
			300 mm	150 002 34	150 002 36
		GL1–GL3	100 mm	150 001 25	150 001 12
			200 mm	150 001 26	150 001 13
			300 mm	150 002 35	150 002 37
		RGL3	100 mm	–	150 006 29
			200 mm	–	150 006 30
			300 mm	–	150 006 31
9	Integral switchgear	G, version ZE	250 000 02	250 000 06	
			G, version ZD	250 000 04	250 000 08
		G, version ZME	250 001 31	250 001 29	
			G, version ZMD	250 001 32	250 001 30
		GL, version ZE	250 000 46	250 000 48	
			GL, version ZD	250 000 47	250 000 49
		1 Hours counter, fitted	G / GL	210 000 69	210 000 69
2 Hours counters, fitted	only G	210 000 70	210 000 70		
10	Magnetic clutch for dual fuel burners GL	(standard on RGL)	250 000 10	250 000 11	
11	Flame sensor (UV cell) instead of ionisation electrode for gas burners		150 002 29	150 002 29	
12	Potentiometer fitted in servomotor (ZM)	220 Ohm	110 002 86	110 002 86	
		1000 Ohm	110 003 03	110 003 03	
13	Burner control LGK 16... instead of LFL	G	250 000 81	250 000 81	
		GL	250 000 82	250 000 83	
		RGL	–	250 000 83	
14	Solenoid valve for air pressure switch test for continuously running motor or post purge		250 000 54	250 000 54	

Please indicate special frequencies and voltages. No extra price.

For motors to insulation class F or type of protection IP 54, additional prices on request.

Burners supplied to TRD 411, 412, 602, 603 and 604
See technical leaflet on DIN 4787 and TRD ...

Accessories and valve trains
For delivery and type see leaflet pages 4 and 10. For prices see accessories list.

Technical Information

CE and type test numbers

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Description		for burners G1/GL1	for burners G3/GL3/RGL3
Burner motor 1 ~ 230V, 50 Hz	Type	EC 90/50-2	EC 90/50-2
Nominal capacity	kW	0.40	0.76
Nominal load at 230 V	A	2.7	6
Motor prefuse	A	10	16
Speed	rpm	2850	2880
Capacitor	µF	16	25
Burner motor 3 ~ 230/400V	Type	EC 90/50-2	EC 90/50-2
Nominal capacity	kW	0.76	0.76
Nominal load at 230/380 V	A	3.6/2.1	3.6/2.1
Motor prefuse	A	6	6
Speed	rpm	2820	2880
Fan		galvanised	galvanised
Ignition transformer	Type	W-ZG 02/2	W-ZG 02/2
Burner control for – single and two stage Z, sliding two stage ZM and modulating burners G and GL	Type	LFL 1.322	LFL 1.322
Servomotor			
– single stage, two stage Z (runtime 8 s.)	Type	-w- 1055/80	-w- 1055/80
– sliding two stage ZM (runtime 20 s.)	Type	SQM 10.15562	SQM 10.15562
– modulating (runtime 42 s.)	Type	SQM 10.16562	SQM 10.16562
Oil pump (on dual fuel burners)	GL RGL	AE67C –	AE97C AJ6CE
Oil solenoid valve 1/8" 115V 1/8"	GL (3 off) RGL (4 off)	7121ZBG1 KRTO –	7121ZBG1 KRTO 121 K 2423
Restricting orifice on solenoid valve 2	ø mm	1.2	1.2
Oil pressure switch 1 - 10 bar	Type	–	900.2378
Oil hoses ID/Length	DN/mm	8/1000	8/1000
Weights			
Gas burners (without valve train)	approx. kg	39	43
Dual fuel burners (without valve trains)	approx. kg	42	47

Burner motor standard version: Insulation class F, type of protection IP54

CE and type test number

Burner type	Product- ID No.	BN No.
Gas burner G		
G1/1-E	CE-0085AP0519	
G3/1-E	CE-0085AP0522	
Dual fuel burner GL		
GL1/1-E	CE-0085AP0519	5G634/2001M
GL3/1-E	CE-0085AP0522	5G635/2001M
Dual fuel burner RGL		
RGL3/1-E	CE-0085AP0522	5G636/2001M

Sewage gas burners

Gas and dual fuel burners sizes 1 and 3 comply with EN 676 and are not tested for sewage gas (see separate price list, print No. 266, for the necessary accessories and components required for sewage gas).

Registration with DVGW is not applicable, as sewage gas or bio gas are not listed in the DVGW worksheet G 260/l.

The following should be noted regarding the other substances in the gas:

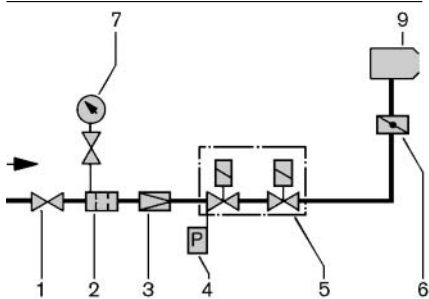
1. The proportion of sulphur compounds in the sewage gas may amount to max. 0.1 Vol.-%.
2. Other substances in the gas must comply with DVGW work sheet G 260/1.
3. The gas must be dry.

Fuel	Abbreviation
Natural gas	E to LL
Liquid Petroleum Gas	F
Oil	EL

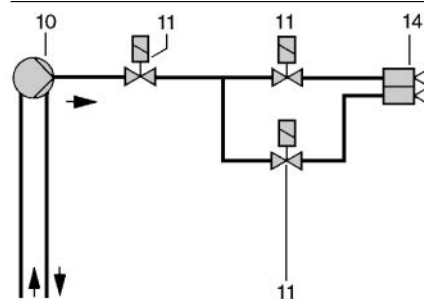
Burner fuel systems

Installation examples

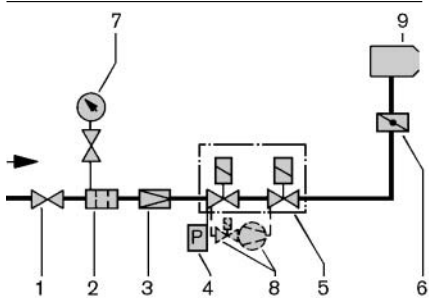
– weishaupt –



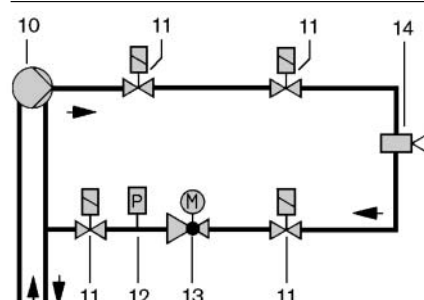
Single stage, two stage Z, sliding two stage ZM and modulating burners with double solenoid valves (DMV)



Dual fuel burners GL1-GL3
Oil side two stage



Single stage, two stage Z, sliding two stage ZM and modulating burners with double solenoid valves (DMV) and valve proving



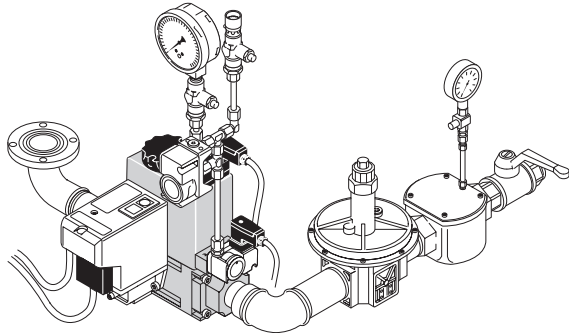
Dual fuel burners RGL3
Oil side sliding two stage or modulating

Legend

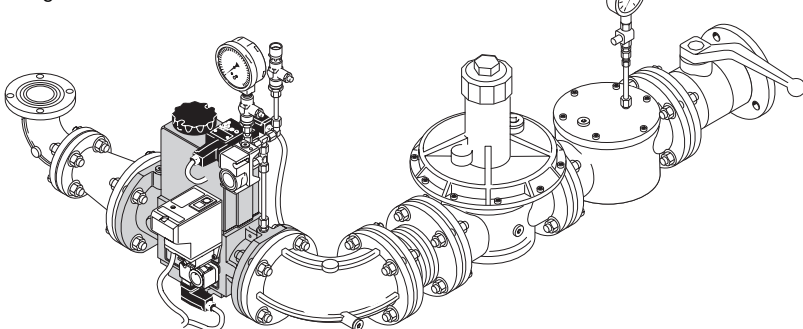
- 1 Ball valve *
- 2 Gas filter *
- 3 Low pressure governor *
- 4 Gas pressure switch
- 5 Double solenoid valves (DMV)
- 6 Gas butterfly valve
- 7 Pressure gauge with push button valve *
- 8 Valve proving VPS *
- 9 Burner
- 10 Pump
- 11 Oil solenoid valve, normally closed
- 12 Oil pressure switch
- 13 Oil regulator
- 14 Nozzles for stage 1 and 2 depending on type of regulation

* not included in burner price

Screwed valve train with two solenoid valves



Flanged valve train with two solenoid valves



Installation example

The installation example shows a burner installation with a standard valve train, i.e. with DMV solenoid valves and other valve train components.

Arrangement of valve train

On boilers with hinged doors, the valve train must be fixed on the opposite side to the door hinges.

Compensator

To ensure stress free fitting of the gas valve train the use of a compensator is recommended.

Disconnecting points in the gas line

Disconnecting points must be provided in the gas line so that the doors of the heating appliance can be swung open. The main gas line is best disconnected at the compensator.

Supporting the valve train

The valve train must be suitably supported according to local conditions. For a number of valve train support components see the Weishaupt accessoires list).

Gas meter

A gas meter must be installed when commissioning to measure the gas consumption.

Weishaupt control technology

– weishaupt –



Weishaupt control panels for

- two stage burners
- three stage burners
- sliding two stage burners and modulating burners

The basic control panels contain the burner controls, i.e. all the components necessary for the operation of a burner.

Description

Weishaupt control panels conform to applicable national/international standards.

Switching includes

- Power supply
- Burner control
- Fan control
- Start-up/regulation
- Door mounted switches
- Door mounted indicating lamps

Individual customer requirements can be met at any time.



Weishaupt control technology for

- Boiler installations
- Thermal process equipment
- Ships execution
- Building management systems

Together with its core business of burners and heating systems, Weishaupt is able to offer, with PLC and DDC systems, complex control technology up to the BMS level.

From planning to handover, tailor made solutions are available from one supplier.

Dimensions

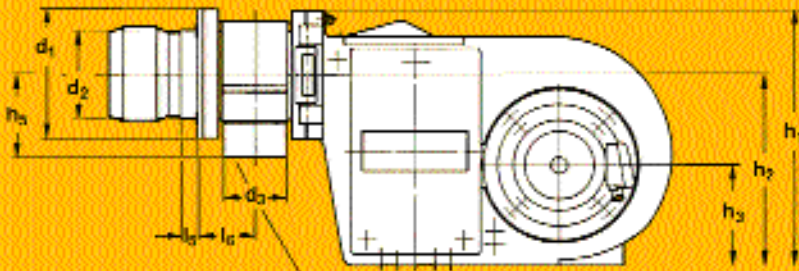
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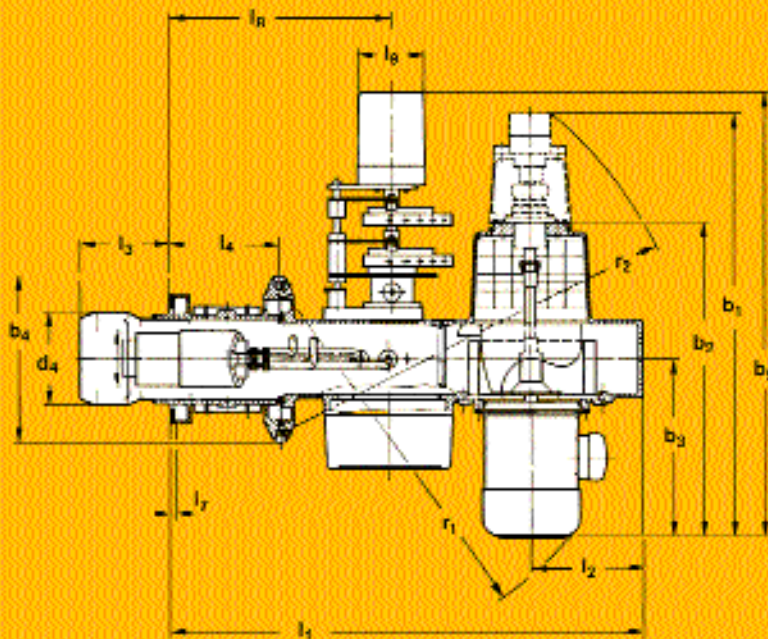
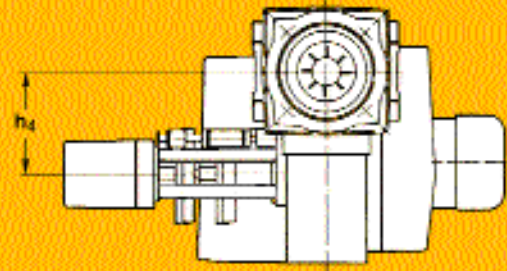
63 Carlton Place, Glasgow, G5 9TW
Tel. (0141) 420 2030, Fax (0141) 420 2088

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Flange connection to ISO 7001

(formerly DIN 2633)



Drilling dimensions of burner plate



Size	Dimensions in mm															
	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	l ₈ ^①	l ₈ ^②	l ₉ ^①	l ₉ ^②	b ₁	b ₂	b ₃	b ₄	b ₅ ^①
1	685	168	112	168	35	88	8	312	342	110	120	655	497	275	248	543
3	805	188	153	188	28	98	8	392	382	110	120	735	525	295	280	570
	b ₅ ^②	b ₅ ^③	h ₁	h ₂	h ₃	h ₄	h ₅	d ₁	d ₂	d ₃	d ₄	d ₅	d ₆ ^④	d ₇	r ₁	r ₂
1	653	–	388	290	150	175	130	195	129	DN25	130	M8	160-170	135	550	630
3	680	750	430	325	170	175	140	220	154	DN40	160	M10	186	165	650	700

- ① Two stage Z burners
- ② Sliding two stage ZM burners
- ③ Sliding two stage RGL burners
- ④ EN 226 has revised burner connection dimensions for boilers. Boilers with ratings from 72 - 150 kW will now have a PCD of 170 mm.