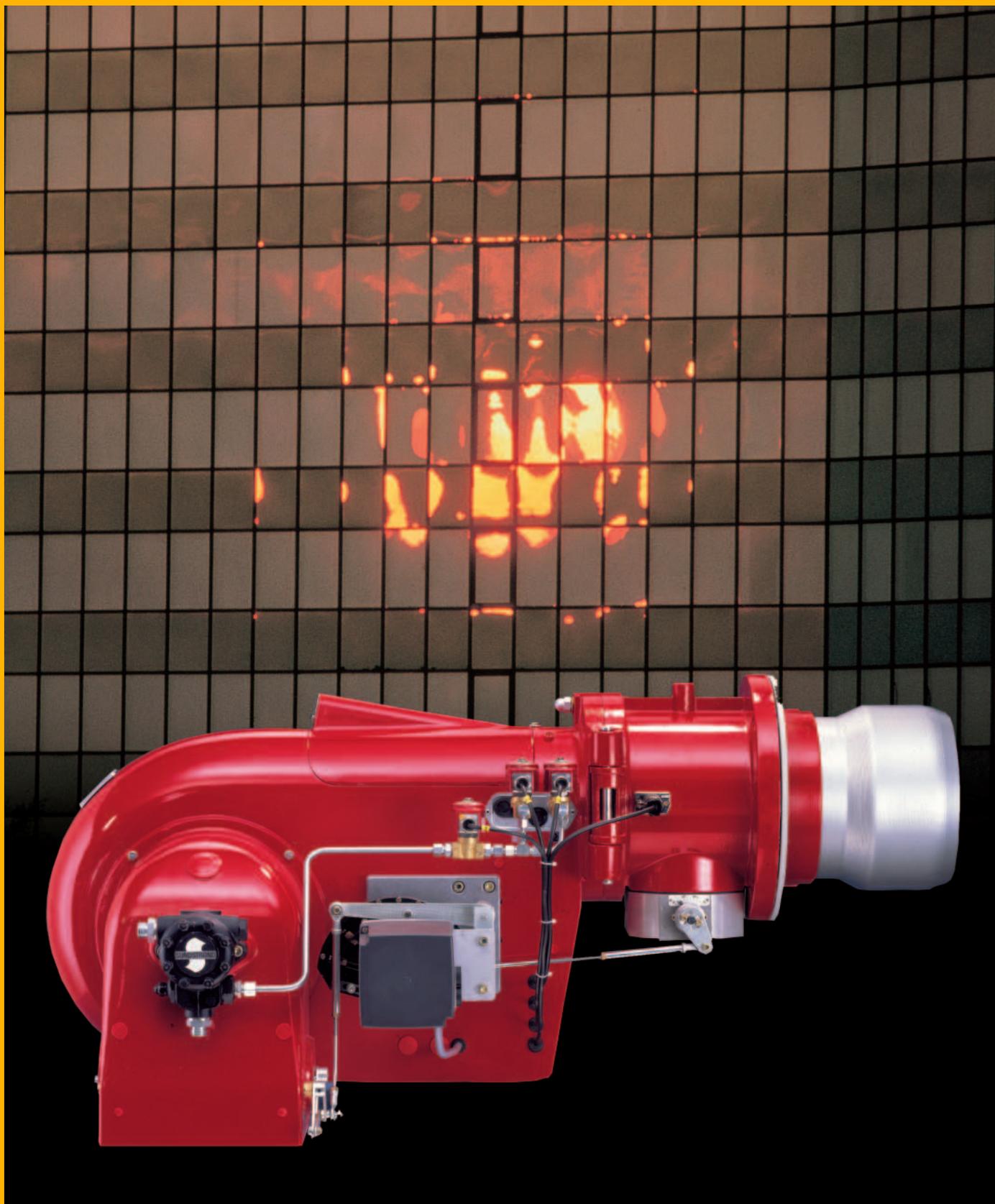


# Weishaupt gas burners type G Dual fuel burner gas/oil types GL and RGL Sizes 5 to 11

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# Description

**Weishaupt gas and dual fuel burners G, G L and RGL satisfy the requirements for operational safety, easy installation, and reliability. They operate economically and environmentally friendly. The oil side of the dual fuel burners comply with DIN EN 267.**

**The gas burners and the gas side of dual fuel burners comply with DIN-EN 676 and the gas appliance guidelines (90/396/EEC) and are EG 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
- 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

All components are assembled in one unit. The motor is mounted at right angles to the air flow direction. The fan rotor is mounted on the motor shaft, which also drives 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 part (Fuel oil DIN 51603):  
Fuel Oil (EL)  
Viscosity up to 6 mm<sup>2</sup>/s at 20°C

Gas part (DVGW work sheet G260):  
Natural Gas E (previous description: H)  
Natural Gas LL (previous description: L)  
Liquid Petroleum Gas F  
Other gas types and fuels on request.

## Application

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

## Regulation

The control of air and fuel takes place according to fuel, burner size and requirements.

- Sliding two stage Z
- Sliding two stage ZM
- Three stage (oil side only)
- Modulating (the standard sliding two stage ZM burner with a 42 secs. servomotor can become modulating by fitting a suitable electronic controller).

Sliding two stage Z burners are fitted with a servomotor with an 8 seconds running time 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 are fitted with a slow acting servomotor, running time approx. 20 or 42 seconds. The air damper and gas control valve are operated by means of a cam arrangement.

With sliding two stage regulation the partial and full load positions are fixed within the burner operating range. The burner moves to one position or the other, depending on the 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.

## Reduced start rate for gas

The burners start with ignition load, which ensures that only a small quantity of gas is released into the combustion chamber. After a time delay, gas is released for the main flame.

Controlled shutdown at partial load  
The regulator and the set point of the

second stage or the modulating control enable the burner to shut down in the partial load. This avoids pressure surges in the gas system on controlled shutdown.

## Flame supervision

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

## Magnetic clutches on dual fuel burners

The coupling between the oil pump and motor is automatically disconnected when operating with gas. The pump is then protected from unnecessary wear and tear.

## Valve trains

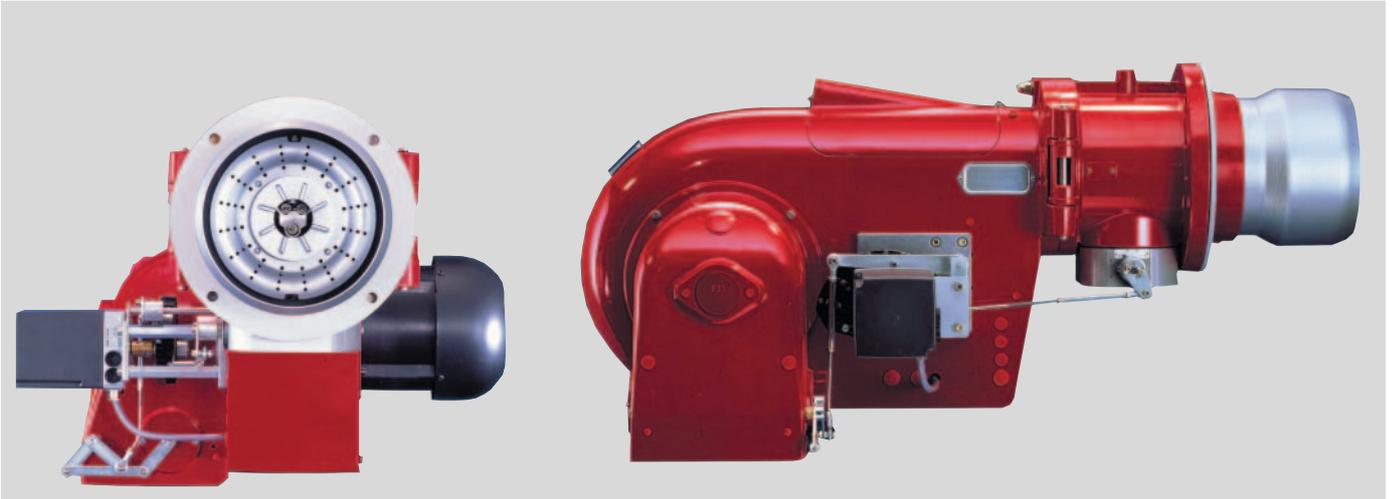
According to DIN-EN 676 burners must be fitted with two solenoid valves. Weishaupt gas and dual fuel burners are supplied as standard with two Class A solenoid valves (double solenoid valve DMV). Weishaupt also recommend the use of a valve proving system. According to DIN-EN 676, valve proving is compulsory from 1.200 kW. These, as well as other gas fittings as for example gas filters and gas pressure regulators can be found in our accessories list.

## Conversion to other gas types

Weishaupt gas and dual fuel burners are identical in their construction for both Natural Gas and Liquid Petroleum Gas. When converting from one gas to another, only recommissioning is required.

## Site of installation

Burners in standard execution (material, construction and type of protection) are designed for operation in covered areas with temperatures of -10° C to +40° C (details for oil operation in minus temperatures and installations in the open, on request).



Gas burner G, sliding two stage (ZM) or modulating (M)



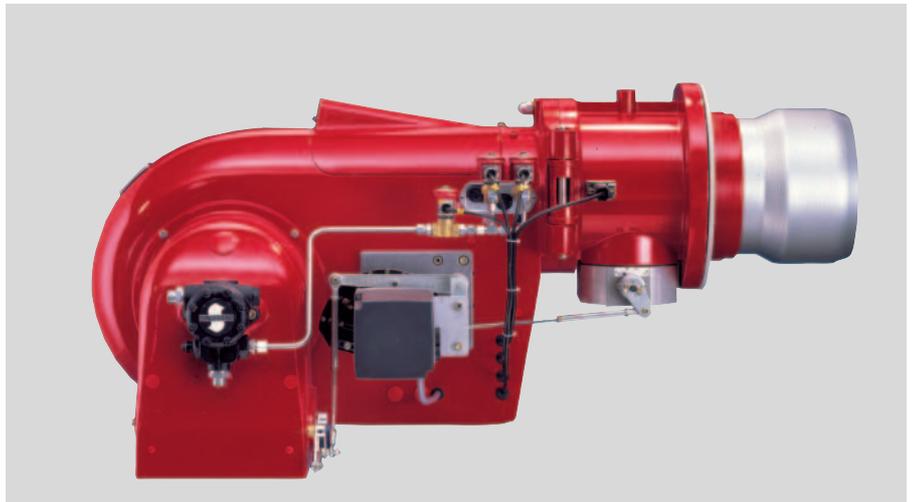
Gas burner G, with inbuilt controls



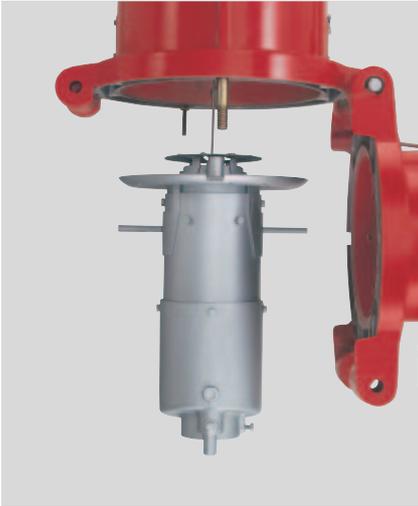
Gas burner G, sliding two stage (Z)



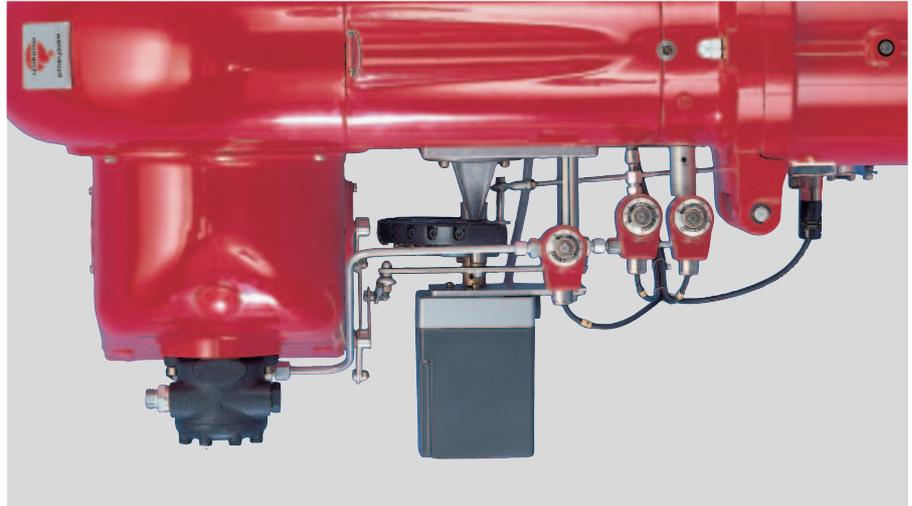
Electromagnetic coupling



Dual fuel burner GL, sliding two stage (ZM) or modulating (M)



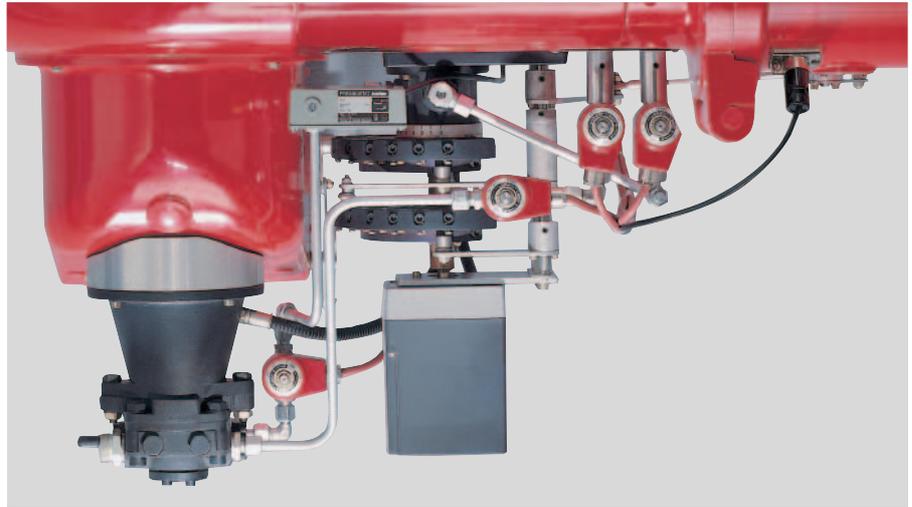
*Hinged flange with easily serviced combustion head*



*Regulating drive dual fuel burner GL: gas side sliding two stage (ZM), oil side two stage*



*Adjustable flame tube for adapting to heating appliance*

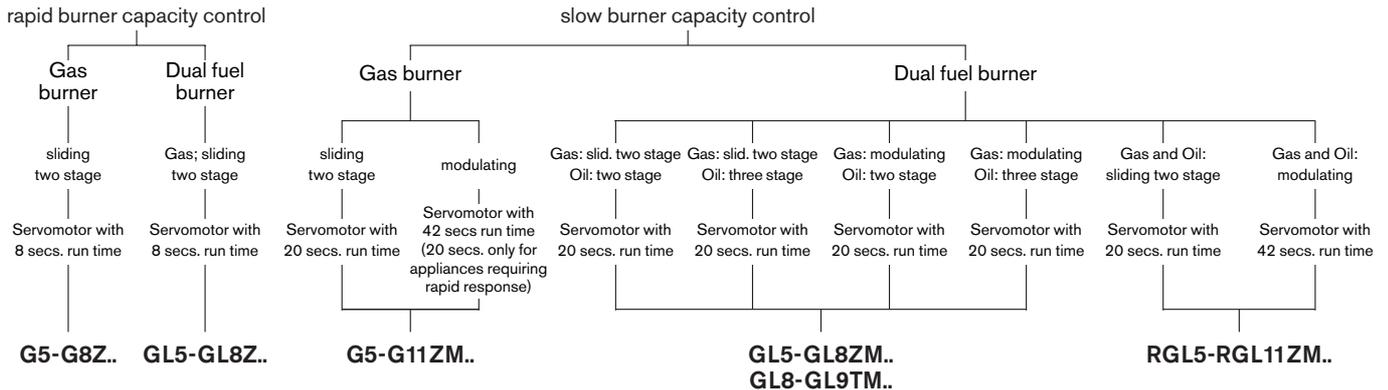


*Regulating drive dual fuel burner RGL: gas and oil side sliding two stage ZM*

# Type survey CE and DIN DVGW registration numbers and type test numbers

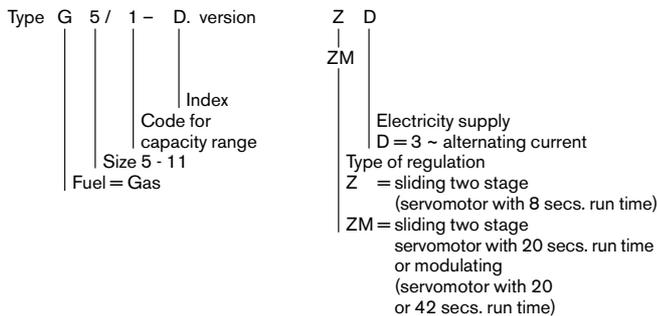
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## Weishaupt gas and dual fuel burners

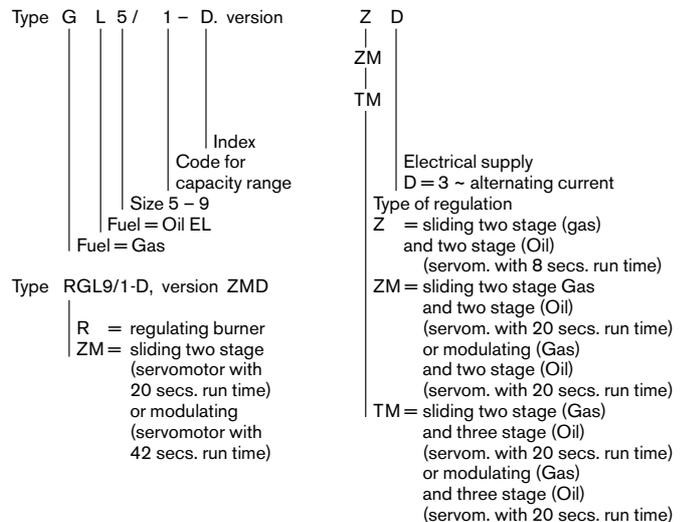


## Explanation of type designation

### Gas burner



### Dual fuel burner



## CE- and DIN DVGW registration numbers, type test numbers

Burner type	Product ID No.	Type test No.
<b>Gas burner G</b>		
G5/1-D	CE-0085AP0525	-
G5/2-D	CE-0085AP0525	-
G7/1-D	CE-0085AP0387	-
G8/1-D	CE-0085AR0039	-
G9/1-D	CE-0085AQ1002	-
G10/1-D	CE-0085AR0040	-
G11/1-D	CE-0085AQ0719	-

Burner type	Product ID No.	Type test No.
<b>Dual fuel burner GL</b>		
GL5/1-D	CE-0085AP0525	5G637/2001M
GL7/1-D	CE-0085AP0387	5G639/2001M
GL8/0-D	CE-0085AS0343	5G810/97M
GL8/1-D	CE-0085AR0039	5G618/2001M
GL9/1-D ①	CE-0085AQ1002	5G590/2001M

① Type test No only valid for burner GL9/1-D, vers. TMD

Burner type	Product ID No.	Type test No.
<b>Dual fuel RGL</b>		
RGL5/1-D	CE-0085AP0525	5G638/2001M
RGL7/1-D	CE-0085AP0387	5G640/2001M
RGL8/1-D	CE-0085AR0039	5G619/2001M
RGL9/1-D	CE-0085AQ1002	5G591/2001M
RGL10/1-D	CE-0085AR0040	5G620/2001M
RGL11/1-D	CE-0085AQ0719	5G521/2001M

### Sewage gas burners

Gas and dual fuel burners, sizes 5 to 8 comply with EN 676, they are not type tested for sewage gas (associated extra prices and prices for accessories see separate price list, print No. 266).

They are no longer registered at the DVGW, as sewage gas and biogas are no longer detailed in the DVGW work sheet G260/l.

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

- The proportion of sulphur compound in sewage gas may amount to max. 0.1 Vol.%.  
2. Other substances in the gas must comply with DVGW work sheet G260/l.
- The gas must be dry.

**The burner types listed are approved for the following fuels:**

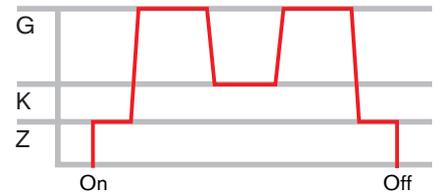
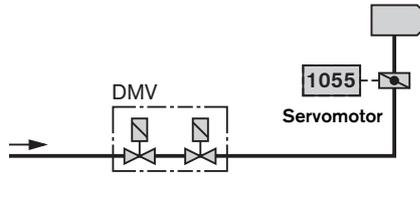
Fuel	Abbreviation
Natural gas (E to LL)	N
Liquid Petroleum Gas (Propane/Butane)	F
Oil	EL

# Types of regulation

## Capacity regulation gas

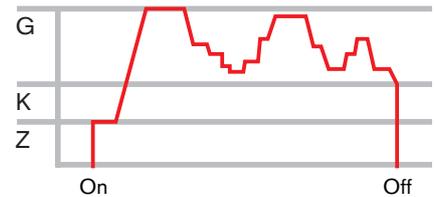
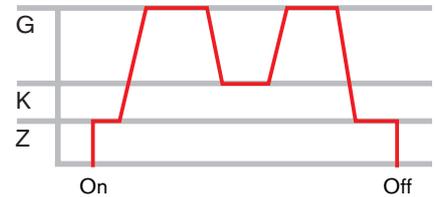
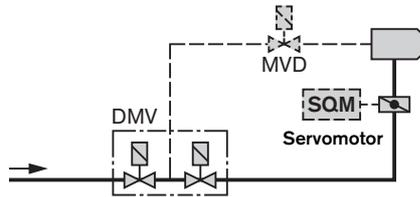
### sliding two stage (Z)

- Gas is released for starting by opening the solenoid valve DMV. The gas butterfly releases the ignition gas quantity.
- Release of the partial and full load gas quantity by the gas butterfly being opened by the servomotor.
- Z = 8 seconds



### sliding two stage (ZM) and modulating (M)

- Gas is released for starting by opening the solenoid valve DMV. The gas butterfly releases the ignition gas quantity. Burner sizes 8 to 11 have an additional valve for ignition gas. On start the solenoid valve for ignition gas opens. After 10 seconds the main gas solenoid valve opens and the ignition gas solenoid valve closes again.
- The burner capacity is controlled between partial and full load by opening and closing the gas butterfly.
- The difference between sliding two stage and modulating burners lies in the electrical regulating equipment and the running time of the burner servomotor. (ZM = 20 seconds, M = 42 seconds)

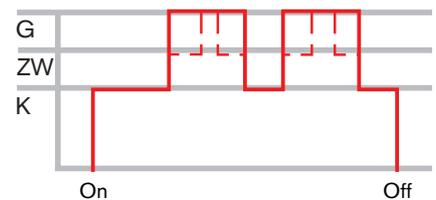
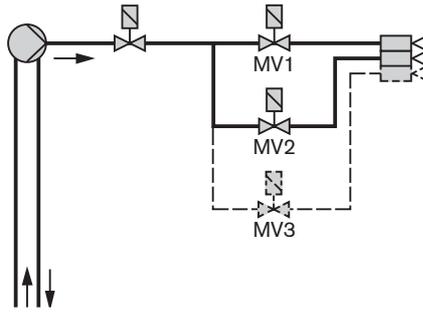


Upper graph: sliding two stage  
Lower graph: modulating  
G = full load, K = partial load  
Z = ignition load

## Capacity regulation oil

### two stage (Z)

- Oil is released at start by energising solenoid valve 1. The burner operates at partial load.
- Full load is obtained by opening solenoid valve 2.
- Capacity is controlled by opening and closing solenoid valve 2.

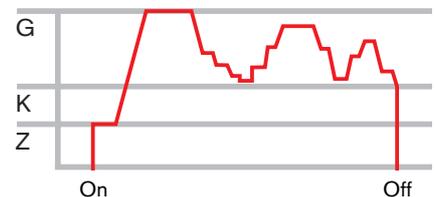
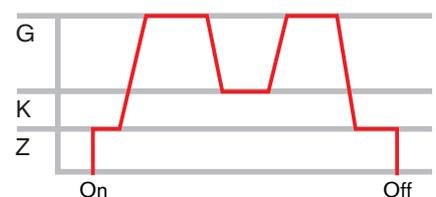
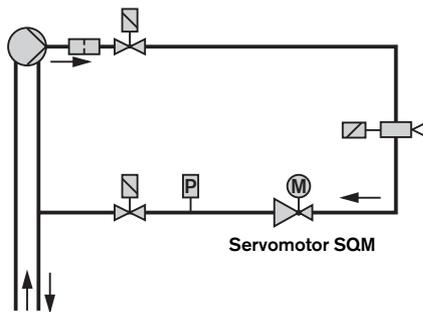


### three stage (TM)

- Oil is released at start by energising solenoid valve 1. The burner operates at partial load.
- Intermediate load is obtained by opening solenoid valve 2.
- Full load is obtained by opening solenoid valve 3.
- Capacity is controlled by opening and closing solenoid valve 3 or solenoid valve 2 and 3.

### sliding two stage (ZM) and modulating (M)

- By opening the solenoid valve (types RGL5 to RGL7) or the nozzle needle in the nozzle head (RGL8 to RGL11) the oil quantity is released for ignition.
- A slow running servomotor moves the oil regulator so that the oil quantity gradually increases up to full rating.
- The capacity between partial and full load is regulated by variable port opening of the oil regulator.
- The difference between sliding two stage and modulating burners lies in the electrical regulating equipment and the running time of the servomotor. (ZM = 20 seconds, M = 42 seconds)



Upper graph: sliding two stage  
Lower graph: modulating  
G = full load, K = partial load  
Z = ignition load

# Included in burner delivery

## Available versions

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Burner type	G5-G8Z	G5-G11ZM	GL5-GL8Z	GL5-GL9ZM GL8-GL9TM	RGL5-RGL11
Burner casing, hinged flange, sight glass cover, Weishaupt burner motor, air control casting, fan, air pressure switch, servomotor, gas/air compound regulation with regulating cam, combustion head, ignition transformer, ignition cable, ignition electrodes, terminal strip, flange gasket, fixing screws	●	●	●	●	●
Interlock switch on hinged flange	●	●	●	●	●
Burner control with flame sensor (ionisation electrode) loose for fitting into control panel	●	●			
Burner control with flame sensor (UV cell) loose for fitting into control panel			●	●	●
Double solenoid valve for gas (DMV), class A (gas valve train DN 150 consists of 2 single solenoid valves type MVD 5150)	●	●	●	●	●
Gas butterfly valve	●	●	●	●	●
Solenoid valve for ignition gas (Group A)	only G8	only G8-G11	only GL8	only GL8-GL9	only RGL8-RGL11
Valve train connection	●	●	●	●	●
Pump for oil, solenoid valves, nozzle head, nozzles, oil hoses			●	●	●
Oil/air compound regulation with regulating cams					●
Oil pressure switch					●
Magnetic coupling, only on RGL5 to RGL11 and GL9 (on GL5 to GL8 at extra price)				only GL9	●

According to DIN EN 676 gas filters and gas governors are part of the burner equipment (see Weishaupt accessories list).

### 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 electrical components on the burner are wired to the connection terminal.

### Included in delivery

1 terminal strip

### Version with complete integral switchgear (at extra cost)

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

### Included in delivery

1 control switch stage 1 with operating lamp  
1 control switch stage 2

1 contactor  
1 overload relay (3 ~ only)  
1 auxiliary contactor  
1 connection terminal strip

Hours counters can be fitted on request.

### Notes on specifications

For installations, which fall under the "Technical Regulations for Steam Boilers", please refer to separate brochure TRD 24 hr./72 hr. Print No. 863

### 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.

# Burner selection gas burners

## Burner capacity / combustion chamber resistance

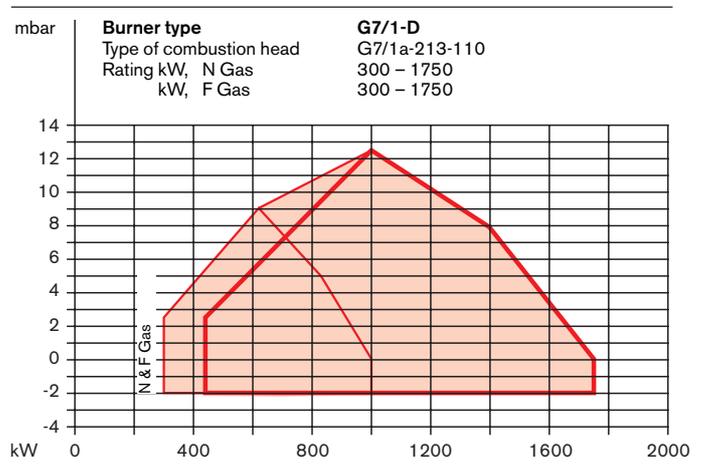
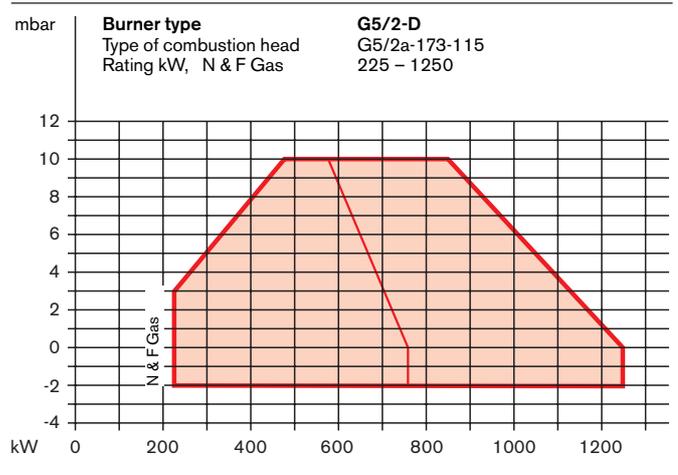
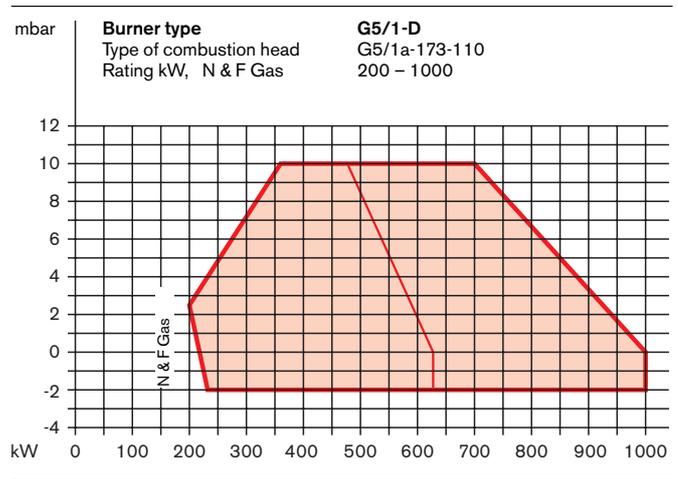
The gas capacity graphs are in accordance with EN 676 and relate to an installation elevation of 500 m. There is a ratings reduction of approx. 1% per 100 m on installations with an elevation above 500 m.

### Gas burners - operation with towns gas or sewage gas

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

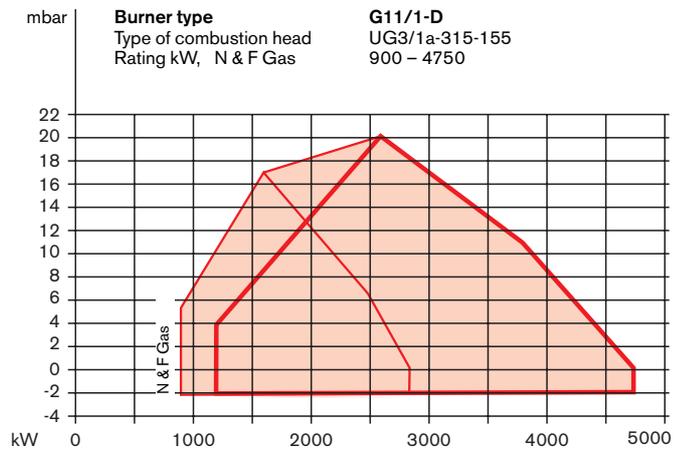
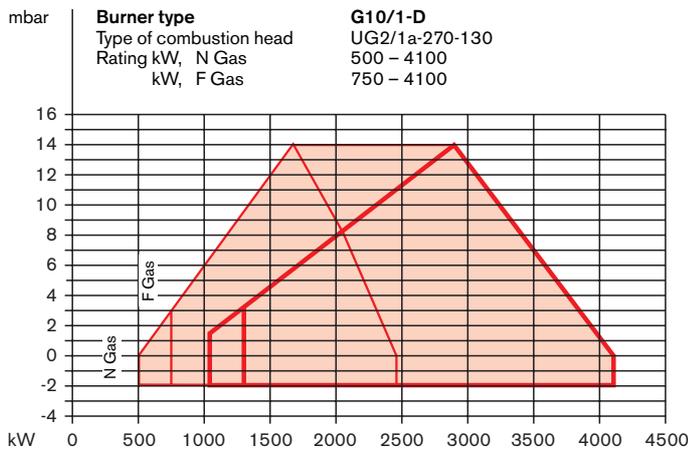
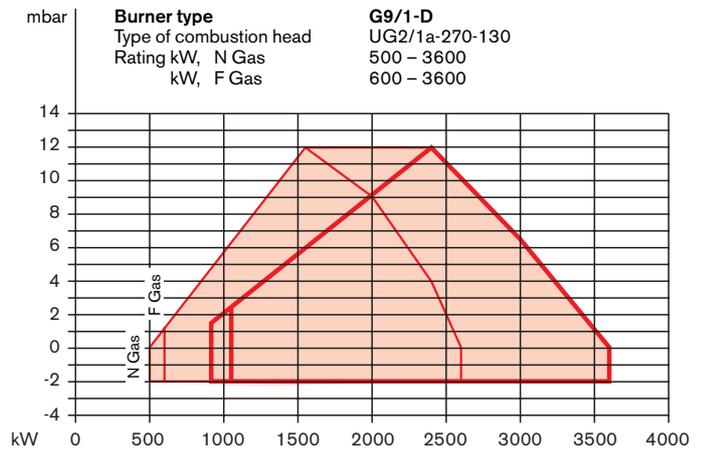
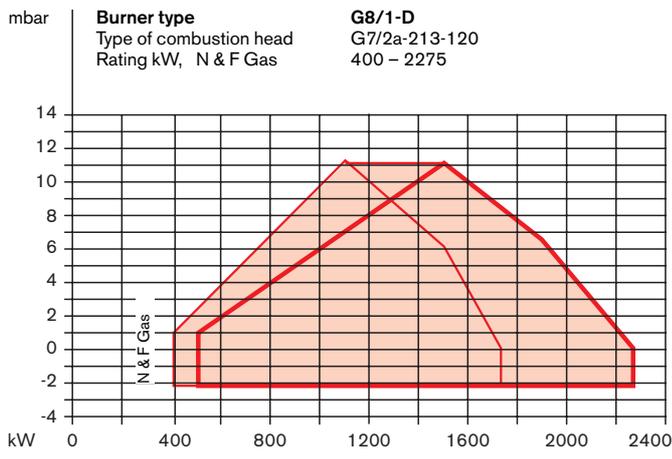
### Gas burners version LN (NO<sub>x</sub> reduced)

Stringent guidelines and limit values of various emission laws can be adhered to by using the gas burners G5 and G7, version NA, which produce particularly low emissions of pollutants. For further information about these burner types see separate leaflet, print number 129.



— Combustion head "open"  
 — Combustion head "closed"  
 see photo p page 4

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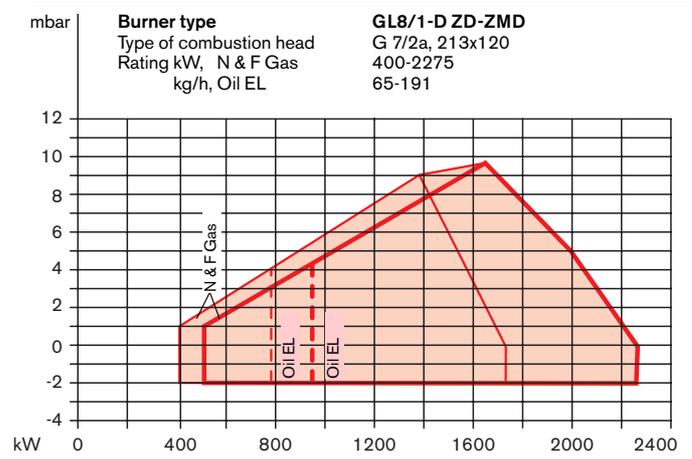
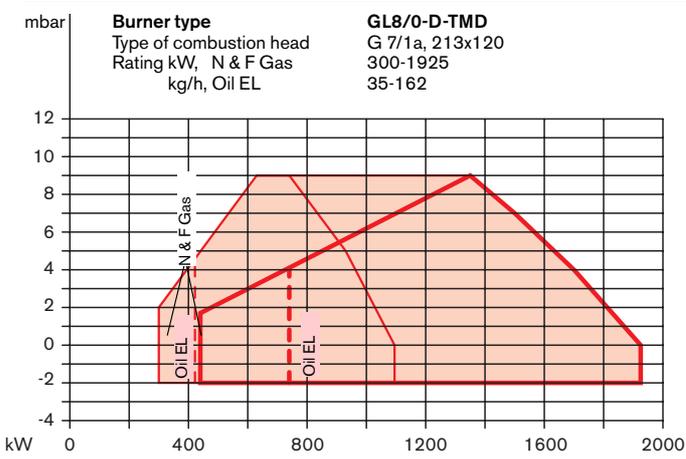
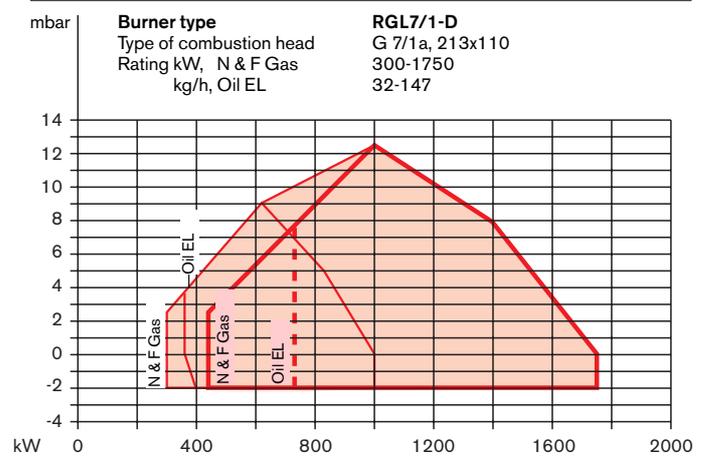
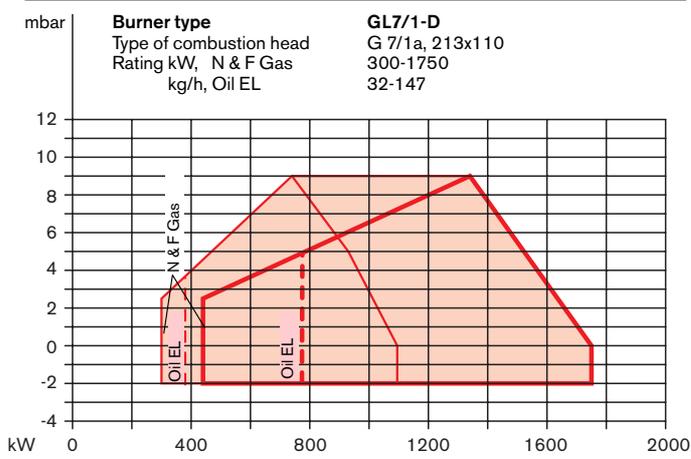
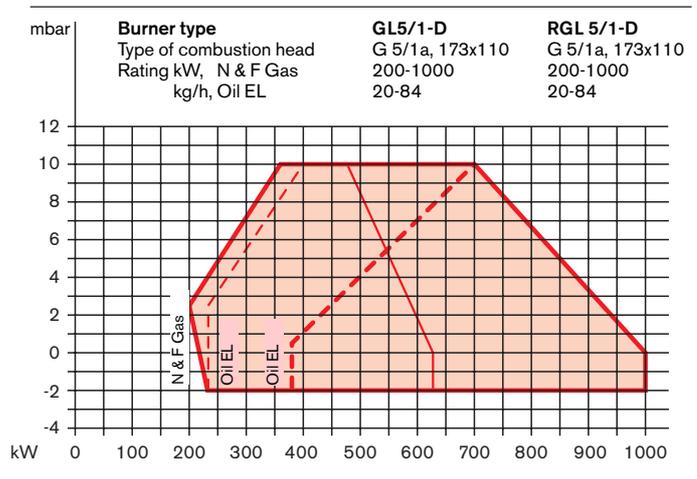
# Burner selection gas burners

## Burner capacity / combustion chamber resistance

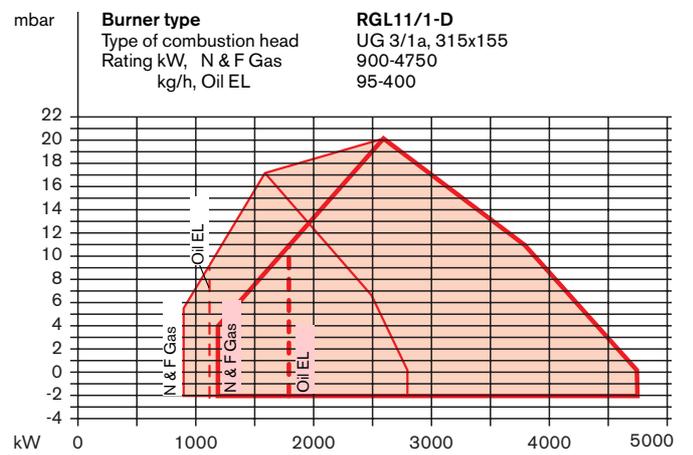
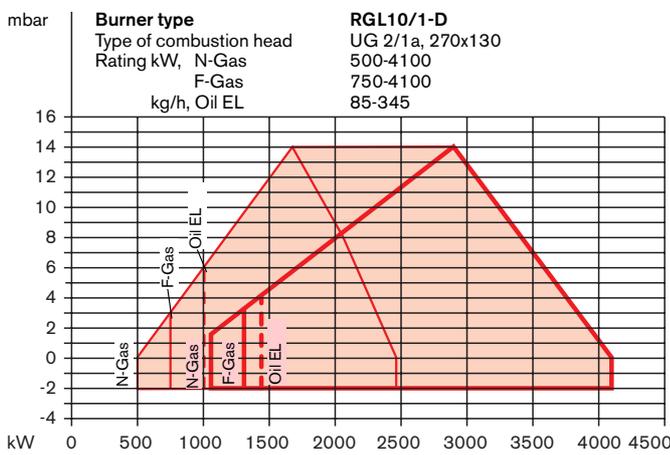
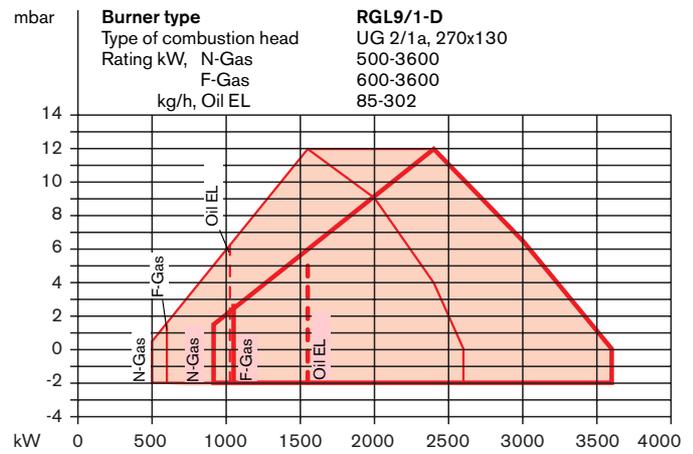
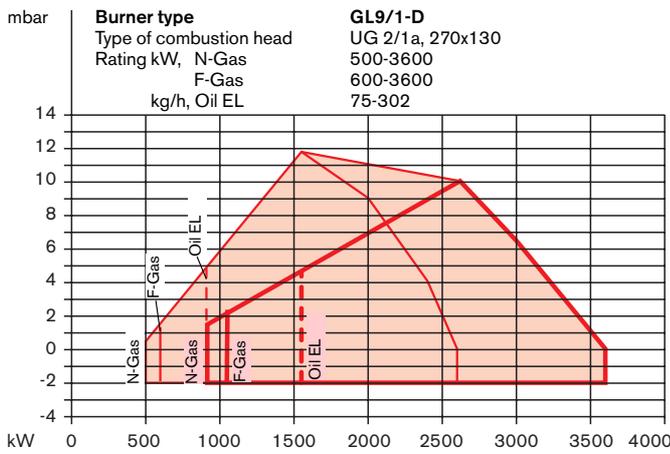
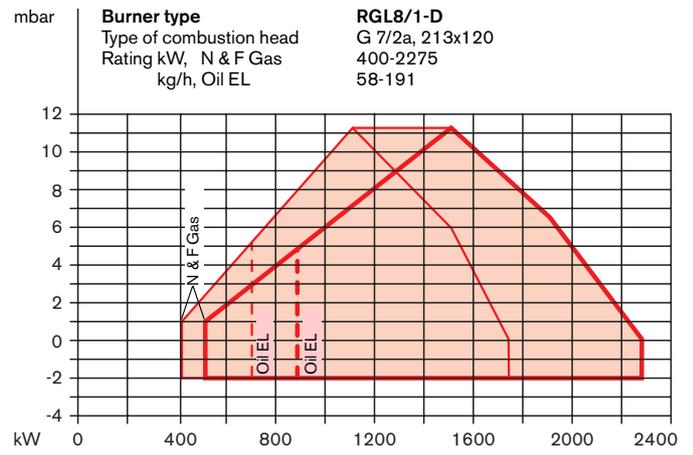
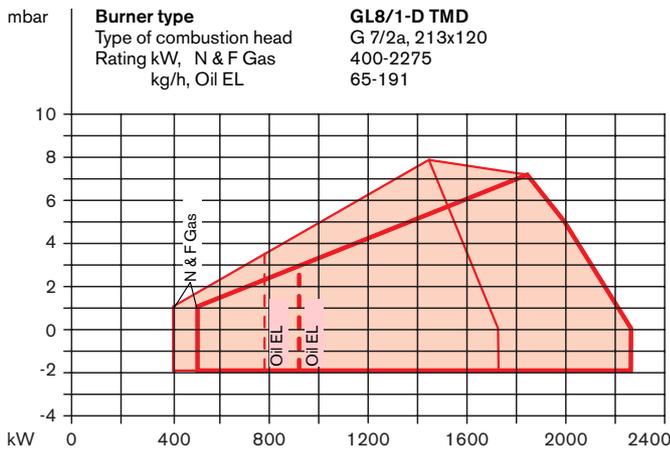
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**Gas burners - operation with town gas or sewage gas**  
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— Combustion head "open"  
 - - - Combustion head "closed"  
 see photo p page 4



# Selection of valve trains with double solenoid valves (DMV)

## Size 5

Rating kW	Low pressure supply (gas pressure in mbar into isolating valve, $P_{e,max} = 300$ mbar)						High pressure supply (setting pressure in mbar into double solenoid valve)					
	Nominal diameter of valve trains						Nominal diameter of valve trains					
	1"	40*	50*	65	80	100	1"	40*	50*	65	80	100
	Nominal diameter of gas butterfly valve						Nominal diameter of gas butterfly valve					
	25	40	50	50	50	50	25	40	50	50	50	50
<b>Natural Gas E</b> , $H_i = 37,26$ MJ/m <sup>3</sup> (10,35 kWh/m <sup>3</sup> ), $d = 0,606$ , $W_i = 47,84$ MJ/m <sup>3</sup>												
500	35	16	11	9	-	-	14	8	7	5	-	-
600	49	20	14	10	9	8	19	10	9	7	6	6
700	64	26	17	12	10	9	25	12	11	8	7	7
800	82	32	20	14	11	10	31	15	13	10	8	8
900	102	39	24	16	13	12	38	18	15	11	9	9
1000	124	46	28	18	14	13	46	21	18	13	10	10
1125	155	56	32	20	15	13	56	25	21	14	11	10
1250	188	67	37	22	16	14	68	29	24	15	12	11
<b>Natural Gas LL</b> , $H_i = 31,79$ MJ/m <sup>3</sup> (8,83 kWh/m <sup>3</sup> ), $d = 0,641$ , $W_i = 39,67$ MJ/m <sup>3</sup>												
500	48	20	13	10	8	-	18	9	8	6	5	5
600	67	27	17	12	10	9	25	12	11	8	7	6
700	90	34	21	14	11	10	33	16	13	10	8	7
800	115	43	25	16	13	12	43	19	16	11	9	9
900	144	52	30	19	15	13	53	23	20	13	11	10
1000	176	63	36	22	16	14	64	28	23	15	12	11
1125	220	77	43	25	18	15	79	33	27	17	13	12
1250	270	93	50	28	20	16	95	39	31	19	14	12
<b>LPG B/P</b> , $H_i = 93,20$ MJ/m <sup>3</sup> (25,89 kWh/m <sup>3</sup> ), $d = 1,555$ , $W_i = 74,73$ MJ/m <sup>3</sup>												
500	18	10	-	-	-	-	7	-	-	-	-	-
600	23	12	9	-	-	-	10	6	6	-	-	-
700	30	15	11	9	8	-	13	8	7	6	5	5
800	38	17	13	10	9	9	16	9	8	7	6	6
900	46	21	14	11	10	9	19	11	9	8	7	7
1000	56	24	16	12	11	10	22	12	11	9	8	7
1125	69	28	18	13	11	11	27	14	12	9	8	8
1250	83	33	21	15	12	11	32	16	14	10	9	8

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

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

Pressure regulators to DIN 3380 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, 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".

The high pressure regulators shown in this brochure are suitable for connection pressures up to 4 bar.

\* The data given for DN 40 are also valid for 1 1/2" and for DN 50 for 2" valve trains.

## Size 7

Rating kW	Low pressure supply (gas pressure in mbar into isolating valve, $P_{e,max} = 300$ mbar)							High pressure supply (setting pressure in mbar into double solenoid valve)						
	Nominal diameter of valve trains							Nominal diameter of valve trains						
	1"	40*	50*	65	80	100	125	1"	40*	50*	65	80	100	125
	Nominal diameter of gas butterfly valve							Nominal diameter of gas butterfly valve						
	40	40	50	65	65	65	65	40	40	50	65	65	65	65
<b>Natural Gas E</b> , $H_i = 37,26$ MJ/m <sup>3</sup> (10,35 kWh/m <sup>3</sup> ), $d = 0,606$ , $W_i = 47,84$ MJ/m <sup>3</sup>														
800	77	30	18	12	9	8	-	26	13	11	7	6	5	5
900	96	37	22	13	10	9	9	32	16	13	9	7	6	6
1000	117	44	26	15	12	10	9	39	19	16	10	8	7	7
1100	141	52	30	17	13	11	10	46	22	19	11	9	8	7
1200	166	61	34	19	14	12	11	55	26	21	13	10	9	8
1400	224	81	44	24	17	14	12	73	34	28	16	12	10	9
1600	290	103	55	29	20	16	14	94	43	35	19	14	12	11
1750	-	122	65	33	22	17	15	111	50	40	22	16	13	12
<b>Natural Gas LL</b> , $H_i = 31,79$ MJ/m <sup>3</sup> (8,83 kWh/m <sup>3</sup> ), $d = 0,641$ , $W_i = 39,67$ MJ/m <sup>3</sup>														
800	109	41	24	14	11	9	8	36	17	14	9	7	6	6
900	136	50	28	16	12	10	9	45	21	17	11	8	7	7
1000	167	61	34	19	13	11	10	54	26	21	12	9	8	7
1100	201	72	40	21	15	12	11	65	30	24	14	10	9	8
1200	237	85	46	24	16	13	12	77	35	28	16	11	10	9
1400	-	113	60	30	20	15	14	103	46	37	20	14	12	10
1600	-	145	76	37	24	18	15	133	59	47	25	17	13	12
1750	-	172	89	43	27	20	17	-	69	55	28	19	15	13
<b>LPG B/P</b> , $H_i = 93,20$ MJ/m <sup>3</sup> (25,89 kWh/m <sup>3</sup> ), $d = 1,555$ , $W_i = 74,73$ MJ/m <sup>3</sup>														
800	35	16	11	8	-	-	-	13	7	7	-	-	-	-
900	43	19	13	9	-	-	-	15	9	8	6	-	-	-
1000	52	22	14	10	9	-	-	18	10	9	6	6	5	5
1100	62	26	16	11	9	9	8	22	12	10	7	6	6	6
1200	72	29	18	12	10	9	9	25	14	12	8	7	6	6
1400	97	38	23	15	12	10	10	33	17	15	10	8	8	7
1600	124	48	28	17	13	12	11	42	21	18	12	10	9	8
1750	147	56	32	19	15	13	12	50	25	21	13	11	10	9

<b>Size 8</b>												
Rating kW	Low pressure supply (gas pressure in mbar into isolating valve, $P_{e,max} = 300$ mbar) <b>Nominal diameter of valve trains</b> 40* 50* 65 80 100 125 Nominal diameter of gas butterfly valve 40 50 65 65 65 65						High pressure supply (setting pressure in mbar into double solenoid valve) <b>Nominal diameter of valve trains</b> 40* 50* 65 80 100 125 Nominal diameter of gas butterfly valve 40 50 65 65 65 65					
<b>Natural Gas E</b> , $H_i = 37,26$ MJ/m <sup>3</sup> (10,35 kWh/m <sup>3</sup> ), $d = 0,606$ , $W_i = 47,84$ MJ/m <sup>3</sup>												
1100	51	28	16	11	10	9	21	17	10	8	7	6
1200	60	33	18	13	10	9	25	20	12	8	7	7
1300	69	38	20	14	11	10	28	23	13	9	8	7
1400	79	43	22	15	12	11	32	26	14	10	9	8
1600	101	54	27	18	14	12	41	33	18	12	10	9
1800	127	66	33	21	16	14	51	40	21	14	11	10
2000	154	80	39	24	18	15	62	49	25	16	13	11
2250	193	99	47	28	20	17	77	60	30	19	15	13
<b>Natural Gas LL</b> , $H_i = 31,79$ MJ/m <sup>3</sup> (8,83 kWh/m <sup>3</sup> ), $d = 0,641$ , $W_i = 39,67$ MJ/m <sup>3</sup>												
1100	71	38	20	14	11	10	29	23	13	9	7	7
1200	83	44	23	15	12	10	34	27	15	10	8	7
1300	97	51	26	17	13	11	39	31	16	11	9	8
1400	111	58	29	18	14	12	45	35	18	12	10	9
1600	143	74	36	22	16	14	57	45	23	15	12	10
1800	179	92	43	25	18	15	71	55	28	17	13	11
2000	220	111	51	30	21	17	86	67	33	20	15	13
2250	276	138	63	35	24	19	107	83	40	24	18	15
<b>LPG B/P</b> , $H_i = 93,20$ MJ/m <sup>3</sup> (25,89 kWh/m <sup>3</sup> ), $d = 1,555$ , $W_i = 74,73$ MJ/m <sup>3</sup>												
1100	25	15	10	8	-	-	11	9	6	5	-	-
1200	28	17	11	9	8	-	13	11	7	6	5	5
1300	32	20	12	10	9	8	14	12	8	6	6	6
1400	37	22	14	11	9	9	16	14	9	7	6	6
1600	46	27	16	12	10	10	20	17	11	8	7	7
1800	57	32	19	14	12	11	25	20	12	10	8	8
2000	69	38	21	15	13	12	29	24	14	11	9	9
2250	85	47	25	18	14	13	36	29	17	13	11	10

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

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

Pressure regulators to DIN 3380 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, 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".

The high pressure regulators shown in this brochure are suitable for connection pressures up to 4 bar.

\* The data given for DN 40 are also valid for 1 1/2" and for DN 50 for 2" valve trains.

<b>Size 9</b>														
Rating kW	Low pressure supply (gas pressure in mbar into isolating valve, $P_{e,max} = 300$ mbar) <b>Nominal diameter of valve trains</b> 40* 50* 65 80 100 125 150 Nominal diameter of gas butterfly valve 50 50 65 80 80 80 80						High pressure supply (setting pressure in mbar into double solenoid valve) <b>Nominal diameter of valve trains</b> 40* 50* 65 80 100 125 150 Nominal diameter of gas butterfly valve 50 50 65 80 80 80 80							
<b>Natural Gas E</b> , $H_i = 37,26$ MJ/m <sup>3</sup> (10,35 kWh/m <sup>3</sup> ), $d = 0,606$ , $W_i = 47,84$ MJ/m <sup>3</sup>														
1600	96	53	27	17	13	11	10	36	32	17	11	9	8	8
1800	120	65	32	20	15	12	11	44	40	20	13	10	9	9
2000	146	79	38	23	16	14	12	54	48	24	15	12	10	10
2200	176	94	44	26	18	15	13	64	57	28	17	13	11	11
2400	208	111	51	29	20	16	14	75	67	33	20	15	13	12
2800	279	147	67	37	25	19	17	100	89	42	24	18	15	14
3200	-	190	84	45	29	22	19	129	114	53	30	21	17	16
3500	-	225	99	52	33	25	21	-	135	62	34	24	19	18
<b>Natural Gas LL</b> , $H_i = 31,79$ MJ/m <sup>3</sup> (8,83 kWh/m <sup>3</sup> ), $d = 0,641$ , $W_i = 39,67$ MJ/m <sup>3</sup>														
1600	136	73	35	21	15	12	11	49	44	22	14	10	9	8
1800	170	91	42	24	17	14	12	61	55	27	16	12	10	10
2000	208	110	50	28	19	15	13	75	66	32	19	14	11	11
2200	250	132	59	33	22	17	15	89	79	38	21	16	13	12
2400	296	156	69	37	24	19	16	105	93	44	24	17	14	13
2800	-	208	91	47	30	22	19	-	124	57	31	21	17	15
3200	-	269	116	59	36	26	22	-	-	72	38	26	20	18
3500	-	-	136	68	41	29	24	-	-	85	44	29	22	20
<b>LPG B/P</b> , $H_i = 93,20$ MJ/m <sup>3</sup> (25,89 kWh/m <sup>3</sup> ), $d = 1,555$ , $W_i = 74,73$ MJ/m <sup>3</sup>														
1600	44	26	15	11	10	9	8	18	16	10	7	7	6	6
1800	54	32	18	13	11	10	9	21	20	12	9	8	7	7
2000	65	38	21	14	12	11	10	26	23	14	10	8	8	8
2200	77	44	24	16	13	12	11	30	27	16	11	9	9	8
2400	91	51	27	18	14	13	11	35	32	18	12	10	9	9
2800	121	67	34	22	17	15	13	46	41	22	15	12	11	11
3200	156	85	42	26	19	17	15	59	52	28	18	15	13	12
3500	185	100	48	29	21	18	16	69	62	32	20	16	14	14

### Size 10

Rating kW	Low pressure supply (gas pressure in mbar into isolating valve, $P_{e,max} = 300$ mbar)							High pressure supply (setting pressure in mbar into double solenoid valve)						
	Nominal diameter of valve trains							Nominal diameter of valve trains						
	40*	50*	65	80	100	125	150	40*	50*	65	80	100	125	150
	Nominal diameter of gas butterfly valve							Nominal diameter of gas butterfly valve						
	50	50	65	80	80	80	80	50	50	65	80	80	80	80
<b>Natural Gas E</b> , $H_i = 37,26$ MJ/m <sup>3</sup> (10,35 kWh/m <sup>3</sup> ), $d = 0,606$ , $W_i = 47,84$ MJ/m <sup>3</sup>														
2000	146	78	37	22	16	13	11	53	47	24	14	11	10	9
2200	175	93	43	25	17	14	13	63	56	28	17	13	11	10
2400	207	110	50	28	19	16	14	74	66	32	19	14	12	11
2600	241	127	58	32	21	17	15	86	76	37	21	15	13	12
2800	278	146	66	36	24	18	16	99	88	41	24	17	14	13
3200	-	189	83	44	28	21	18	128	113	52	29	20	16	15
3600	-	-	102	53	33	24	20	-	-	64	34	24	19	17
3950	-	-	121	61	37	27	23	-	-	76	40	27	21	19
<b>Natural Gas LL</b> , $H_i = 31,79$ MJ/m <sup>3</sup> (8,83 kWh/m <sup>3</sup> ), $d = 0,641$ , $W_i = 39,67$ MJ/m <sup>3</sup>														
2000	208	110	50	28	19	15	13	74	66	31	18	13	11	10
2200	250	131	59	32	21	16	14	89	78	37	21	15	12	11
2400	296	155	68	36	23	18	15	105	92	43	24	17	13	12
2600	-	180	79	41	26	20	17	122	107	49	27	19	15	13
2800	-	208	90	46	29	21	18	-	123	56	30	21	16	14
3200	-	-	115	58	35	25	21	-	-	71	37	25	19	17
3600	-	-	142	70	41	29	23	-	-	88	45	29	22	19
3950	-	-	169	82	47	33	26	-	-	104	52	33	24	21
<b>LPG B/P</b> , $H_i = 93,20$ MJ/m <sup>3</sup> (25,89 kWh/m <sup>3</sup> ), $d = 1,555$ , $W_i = 74,73$ MJ/m <sup>3</sup>														
2000	65	37	20	14	11	10	9	25	23	13	9	8	7	7
2200	77	43	23	15	12	11	10	30	27	15	10	9	8	8
2400	90	50	26	17	13	12	11	34	31	17	12	10	9	8
2600	105	58	29	19	15	13	12	40	36	19	13	11	10	9
2800	120	66	33	21	16	14	12	45	41	22	14	12	10	10
3200	155	84	41	25	18	16	14	58	52	27	17	14	12	11
3600	194	104	49	29	21	17	16	71	64	32	20	16	14	13
3950	231	124	58	33	23	19	17	85	75	38	23	18	15	14

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

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

Pressure regulators to DIN 3380 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, 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".

The high pressure regulators shown in this brochure are suitable for connection pressures up to 4 bar.

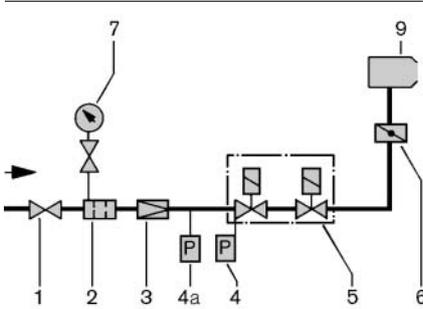
\* The data given for DN 40 are also valid for 1 1/2" and for DN 50 for 2" valve trains.

### Size 11

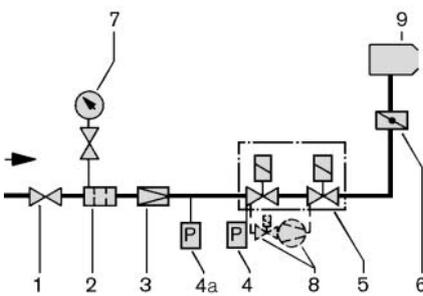
Rating kW	Low pressure supply (gas pressure in mbar into isolating valve, $P_{e,max} = 300$ mbar)							High pressure supply (setting pressure in mbar into double solenoid valve)						
	Nominal diameter of valve trains							Nominal diameter of valve trains						
	40*	50*	65	80	100	125	150	40*	50*	65	80	100	125	150
	Nominal diameter of gas butterfly valve							Nominal diameter of gas butterfly valve						
	65	65	65	80	100	100	100	65	65	65	80	100	100	100
<b>Natural Gas E</b> , $H_i = 37,26$ MJ/m <sup>3</sup> (10,35 kWh/m <sup>3</sup> ), $d = 0,606$ , $W_i = 47,84$ MJ/m <sup>3</sup>														
3200	-	182	82	43	26	20	16	121	106	51	27	19	14	13
3400	-	204	91	47	29	21	17	136	119	57	30	20	16	14
3600	-	228	101	51	31	22	18	-	132	63	33	22	17	15
3800	-	-	112	56	33	24	20	-	-	69	36	24	18	16
4000	-	-	123	61	36	26	21	-	-	76	39	25	19	17
4400	-	-	146	72	41	29	23	-	-	90	46	29	21	19
4800	-	-	172	84	47	32	25	-	-	106	53	33	24	21
5100	-	-	193	93	52	35	27	-	-	118	59	36	26	22
<b>Natural Gas LL</b> , $H_i = 31,79$ MJ/m <sup>3</sup> (8,83 kWh/m <sup>3</sup> ), $d = 0,641$ , $W_i = 39,67$ MJ/m <sup>3</sup>														
3200	-	-	113	56	33	23	19	-	-	70	36	23	17	15
3400	-	-	127	63	36	25	20	-	-	78	39	25	18	16
3600	-	-	141	69	39	27	21	-	-	87	43	27	19	17
3800	-	-	156	76	42	29	23	-	-	96	47	29	21	18
4000	-	-	172	83	46	31	24	-	-	105	52	31	22	19
4400	-	-	205	98	53	35	27	-	-	125	61	36	25	21
4800	-	-	-	114	61	39	30	-	-	71	41	28	24	24
5100	-	-	-	127	67	43	32	-	-	78	45	30	25	25
<b>LPG B/P</b> , $H_i = 93,20$ MJ/m <sup>3</sup> (25,89 kWh/m <sup>3</sup> ), $d = 1,555$ , $W_i = 74,73$ MJ/m <sup>3</sup>														
3200	151	81	40	24	17	14	12	54	48	25	16	12	11	10
3400	170	90	44	26	18	15	13	61	54	28	17	13	11	11
3600	189	100	48	28	19	16	14	67	59	31	19	14	12	11
3800	210	111	53	30	21	17	15	74	66	34	20	15	13	12
4000	232	122	58	32	22	18	15	82	72	37	22	16	14	13
4400	279	145	68	37	25	20	17	98	86	43	25	18	15	14
4800	-	171	79	43	28	22	19	115	101	50	29	20	17	15
5100	-	192	88	47	30	23	20	129	113	56	31	22	18	16

# Burner fuel systems

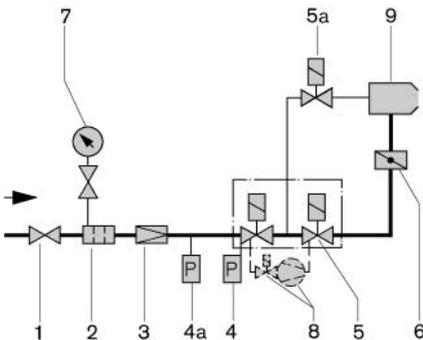
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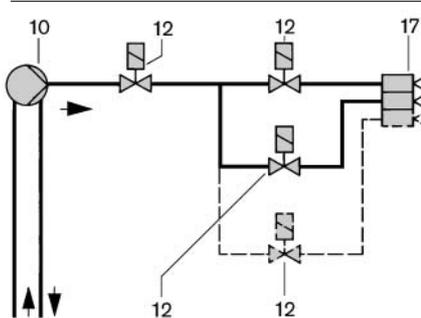
Sliding two stage (Z), sliding two stage (ZM), and modulating (M) burners (size 5 to 7) with DMV solenoid valves



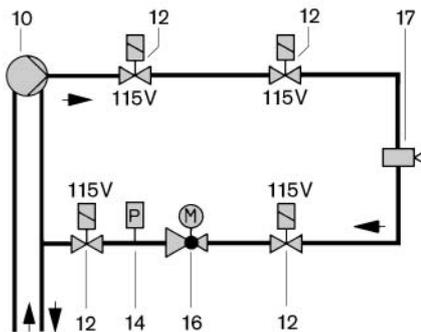
Sliding two stage (Z), sliding two stage (ZM) and modulating (M) burners (size 5 to 7) with DMV solenoid valves and VPS valve proving



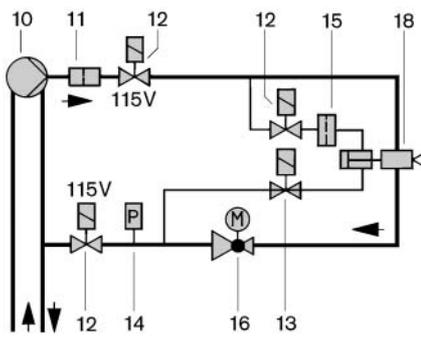
Sliding two stage (Z), sliding two stage (ZM), three stage (TM) and modulating (M) burners (size 8 to 11) with DMV solenoid valves and VPS valve proving



Dual fuel burners GL5 to GL9 (oil part two stage)  
GL8 to GL9 (oil part three stage)



Dual fuel burners RGL5 to RGL7  
oil part sliding two stage or modulating



Dual fuel burners RGL8 to RGL11  
oil part sliding two stage or modulating

## Legend

- 1 Ball valve <sup>1</sup>
  - 2 Gas filter <sup>1</sup>
  - 3 Governor (low pressure) <sup>1</sup>
  - 4 Gas pressure switch
  - 4a Gas pressure switch, max. (with TRD) <sup>1</sup>
  - 5 Double solenoid valve (DMV) <sup>2</sup>
  - 5a Solenoid valve for ignition gas
  - 6 Gas butterfly valve
  - 7 Pressure gauge with push button valve <sup>1</sup>
  - 8 Valve proving system VPS <sup>1</sup>
  - 9 Burner
  - 10 Pump
  - 11 Filter
  - 12 Solenoid valve for oil, normally closed
  - 13 Solenoid valve for oil, normally open
  - 14 Oil pressure switch
  - 15 Restricting orifice
  - 16 Oil regulator
  - 17 Nozzles for stage 1,2 and 3, depending type of regulation
  - 18 Nozzle head with shut off device
- <sup>1</sup> Not included in burner price.  
<sup>2</sup> at DN 150 with individual gas valves

# Gas burner Type G

DMV gas valve train R/DN	Gas and dual fuel burners Order No.
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## Size 5

### Type G5/1-D, Version ZD

1"	151 514 91
1 1/2"	151 514 92
2"	151 514 93
40	151 524 91
50	151 534 91
65	151 544 91
80	151 554 91
100	151 564 91

### Type G5/1-D, Version ZMD

1"	151 517 81
1 1/2"	151 517 84
2"	151 517 85
40	151 527 81
50	151 537 81
65	151 547 81
80	151 557 81
100	151 567 81

### Type G5/2-D, Version ZD

1"	151 515 91
1 1/2"	151 515 92
2"	151 515 93
40	151 525 91
50	151 535 91
65	151 545 91
80	151 555 91
100	151 565 91

### Type G5/2-D, Version ZMD

1"	151 518 81
1 1/2"	151 518 84
2"	151 518 85
40	151 528 81
50	151 538 81
65	151 548 81
80	151 558 81
100	151 568 81

## Size 7

### Type G7/1-D, Version ZD

1"	151 714 91
1 1/2"	151 714 92
2"	151 714 93
40	151 724 91
50	151 734 91
65	151 744 91
80	151 754 91
100	151 764 91
125	151 774 91

### Type G7/1-D, Version ZMD

1"	151 717 81
1 1/2"	151 717 82
2"	151 717 83
40	151 727 81
50	151 737 81
65	151 747 81
80	151 757 81
100	151 767 81
125	151 777 81

DMV gas valve train R/DN	Gas and dual fuel burners Order No.
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## Size 8

### Type G8/1-D, Version ZD

1 1/2"	151 814 92
2"	151 814 93
40	151 824 91
50	151 834 91
65	151 844 91
80	151 854 91
100	151 864 91
125	151 874 91

### Type G8/1-D, Version ZMD

1 1/2"	151 817 82
2"	151 817 83
40	151 827 81
50	151 837 81
65	151 847 81
80	151 857 81
100	151 867 81
125	151 877 81

## Size 9

### Type G9/1-D, Version ZMD

1 1/2"	151 917 82
2"	151 917 83
40	151 927 81
50	151 937 81
65	151 947 81
80	151 957 81
100	151 967 81
125	151 977 81
150	151 987 81

## Size 10

### Type G10/1-D, Version ZMD

1 1/2"	191 017 82
2"	191 017 83
40	191 027 81
50	191 037 81
65	191 047 81
80	191 057 81
100	191 067 81
125	191 077 81
150	191 087 81

## Size 11

### Type G11/1-D, Version ZMD

1 1/2"	191 117 82
2"	191 117 83
40	191 127 81
50	191 137 81
65	191 147 81
80	191 157 81
100	191 167 81
125	191 177 81
150	191 187 81

### Important Note

If sliding two stage burners (ZM) are used as modulating burners, this should be stated in the order. These two versions differ in the different running times of the servomotor for compound regulation.

# Dual fuel burners type GL and RGL

–weishaupt–

DMV gas valve train R/DN	Gas and dual fuel burners Order No.
--------------------------	--

## Size 5

### Type GL5/1-D, Version ZD

1"	155 514 91
1 1/2"	155 514 92
2"	155 514 93
40	155 524 91
50	155 534 91
65	155 544 91
80	155 554 91
100	155 564 91

### Type GL5/1-D, Version ZMD

1"	155 517 81
1 1/2"	155 517 82
2"	155 517 83
40	155 527 81
50	155 537 81
65	155 547 81
80	155 557 81
100	155 567 81

### Type RGL5/1-D, Version ZMD

1"	656 517 81
1 1/2"	656 517 82
2"	656 517 83
40	656 527 81
50	656 537 81
65	656 547 81
80	656 557 81
100	656 567 81

## Size 7

### Type GL7/1-D, Version ZD

1"	155 714 91
1 1/2"	155 714 92
2"	155 714 93
40	155 724 91
50	155 734 91
65	155 744 91
80	155 754 91
100	155 764 91
125	155 774 91

### Type GL7/1-D, Version ZMD

1"	155 717 81
1 1/2"	155 717 82
2"	155 717 83
40	155 727 81
50	155 737 81
65	155 747 81
80	155 757 81
100	155 767 81
125	155 777 81

DMV gas valve train R/DN	Gas and dual fuel burners Order No.
--------------------------	--

### Type RGL7/1-D, Version ZMD

1"	656 717 81
1 1/2"	656 717 82
2"	656 717 83
40	656 727 81
50	656 737 81
65	656 747 81
80	656 757 81
100	656 767 81
125	656 777 81

## Size 8

### Type GL8/0-D, Version TMD

1 1/2"	155 818 11
2"	155 818 12
40	155 828 11
50	155 838 11
65	155 848 11
80	155 858 11
100	155 868 11
125	155 878 11

### Type GL8/1-D, Version ZD

1 1/2"	155 814 92
2"	155 814 93
40	155 824 91
50	155 834 91
65	155 844 91
80	155 854 91
100	155 864 91
125	155 874 91

### Type GL8/1-D, Version ZMD

1 1/2"	155 817 82
2"	155 817 83
40	155 827 81
50	155 837 81
65	155 847 81
80	155 857 81
100	155 867 81
125	155 877 81

### Type GL8/1-D, Version TMD

1 1/2"	155 818 82
2"	155 818 83
40	155 828 81
50	155 838 81
65	155 848 81
80	155 858 81
100	155 868 81
125	155 878 81

### Type RGL8/1-D, Version ZMD

1 1/2"	656 817 82
2"	656 817 83
40	656 827 81
50	656 837 81
65	656 847 81
80	656 857 81
100	656 867 81
125	656 877 81

DMV gas valve train R/DN	Gas and dual fuel burners Order No.
--------------------------	--

## Size 9

### Type GL9/1-D, Version ZMD\*

1 1/2"	155 917 82
2"	155 917 83
40	155 927 81
50	155 937 81
65	155 947 81
80	155 957 81
100	155 967 81
125	155 977 81

### Type GL9/1-D, Version TMD

1 1/2"	155 918 82
2"	155 918 83
40	155 928 81
50	155 938 81
65	155 948 81
80	155 958 81
100	155 968 81
125	155 978 81

### Type RGL9/1-D, Version ZMD

1 1/2"	656 917 82
2"	656 917 83
40	656 927 81
50	656 937 81
65	656 947 81
80	656 957 81
100	656 967 81
125	656 977 81
150	656 987 81

## Size 10

### Typ RGL10/1-D, Version ZMD

1 1/2"	696 017 82
2"	696 017 83
40	696 027 81
50	696 037 81
65	696 047 81
80	696 057 81
100	696 067 81
125	696 077 81
150	696 087 81

## Size 11

### Type RGL11/1-D, Version ZMD

1 1/2"	696 117 82
2"	696 117 83
40	696 127 81
50	696 137 81
65	696 147 81
80	696 157 81
100	696 167 81
125	696 177 81
150	696 187 81

### Important Note

If sliding two stage burners (ZM) are used as modulating burners, this should be stated in the order. These two versions differ in the different running times of the servomotor for compound regulation.

\* for export only, not approved in Germany

# Special equipment

Item No.	Description		G5/GL5/RGL5 Order No.	G7/GL7/RGL7 Order No.
<b>Additional price</b>				
1	<b>Downward firing burner version</b>		standard	standard
2	<b>Air intake flange</b> for connection of air duct		110 001 05	110 001 06
3	<b>Pump</b>	GL	J7 instead of J6, from 200 kg/h	–
		GL	TA2 instead of J6, from 250 kg/h	–
		GL	E6 instead of J6, for ring main pressure >2,0 bar	110 017 22
		RGL	E6 instead of J6, for ring main pressure >2,0 bar	110 017 22
		GL	E7 instead of J7, for ring main pressure >2,0 bar	–
4	<b>Oil hoses</b> 1300 mm instead of 1000 mm long	GL	150 000 47	150 000 47
		RGL	150 000 47	150 000 44
5	<b>Pressure gauge</b> with ball valve	for GL	(oil part only)	110 000 79
		for RGL	(oil part only)	110 002 82
	<b>Pressure gauge</b> with ball valve (return)		RGL (oil part)	–
6	<b>Vacuum gauge</b> with ball valve	GL/RGL	GL/RGL (oil part)	110 005 69
7	<b>Oil meter</b> fitted		GL	150 012 38
8	<b>Combustion head extensions</b>	G5–G10	by 100 mm	150 003 09
		G5–G11	by 200 mm	150 001 09
		G5–G11	by 300 mm	150 002 38
		GL5–GL9	by 100 mm	150 003 10
		GL5–GL9	by 200 mm	150 001 14
		GL5–GL9	by 300 mm	150 002 39
		GL8T+GL9T	by 100 mm	–
		GL8T+GL9T	by 200 mm	–
		GL8T+GL9T	by 300 mm	–
		RGL5–RGL10	by 100 mm	150 006 32
		RGL5–RGL11	by 200 mm	150 006 33
		RGL5–RGL11	by 300 mm	150 006 34
9	<b>Inbuilt switchgear</b> for dual fuel burner	GL (with magnetic coupling)	not poss. w. add. high pressure switch	
		(ZD) sliding two stage		150 014 63
		(ZMD) sliding two stage or modulating		150 014 62
	<b>Inbuilt switchgear</b> for dual fuel burner	GL (without magnetic coupling)		
		(ZD) sliding two stage		150 010 83
		(ZMD) sliding two stage or modulating		150 014 61
	<b>Inbuilt switchgear</b> for dual fuel burner	GL (without magnetic coupling)		
		(Z) sliding two stage		150 006 54
		(ZM) sliding two stage or modulating		150 010 22
10	<b>Magnetic coupling</b> for dual fuel burner		GL (standard on RGL)	150 002 74
11	<b>Flame sensor (UV cell)</b> instead of ionisation electrode (standard on dual fuel burners)			150 002 29
12	<b>Potentiometer</b> in servomotor		ZM 220 Ohm	110 002 86
			ZM 1000 Ohm	110 003 03
13	<b>Burner control</b> LGK16... instead of LFL		G	250 000 81
			GL	150 009 75
			RGL	150 009 75
14	<b>Solenoid valve for air pressure</b> switch test for continuous running motor or post purge			150 010 07

## Please note

For installations, which are in accordance with regulations to TRD, please refer to the technical leaflet "Weishaupt burners on steam and hot water boilers", print No. 863.

## Accessories and valve trains

For delivery and type see page 15 and 22. For prices see accessories list.

## Please indicate if special voltages and frequencies are required. No extra cost.

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

G8/GL8/RGL8 Order No.	G9/GL9/RGL9 Order No.	G10/RGL10 Order No.	G11/RGL11 Order No.
standard	standard	standard	standard
110 001 06	110 002 77	110 002 77	110 002 77
–	110 015 43	–	–
–	150 005 15	–	–
110 017 22	110 017 22	–	–
–	–	–	–
–	110 015 44	–	–
150 000 47	150 000 47	–	–
150 000 44	150 000 44	150 000 44	standard
110 000 79	110 000 79	–	–
110 002 82	110 002 82	110 002 82	110 002 82
110 010 78	110 010 78	110 010 78	110 010 78
110 005 69	110 005 69	110 005 69	110 005 69
150 012 41	150 012 42	–	–
150 007 60	150 002 44	150 002 44	–
150 007 61	150 002 45	150 002 45	190 000 14
150 007 62	150 001 27	150 001 27	190 000 15
150 007 68	150 002 50	–	–
150 007 69	150 002 51	–	–
150 007 70	150 001 28	–	–
150 007 76	150 006 97	–	–
150 007 77	150 006 89	–	–
150 007 78	150 006 90	–	–
150 007 84	150 002 56	150 002 56	–
150 007 85	150 002 57	150 002 57	190 000 16
150 007 86	150 001 29	150 001 29	190 000 17
150 017 40	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
150 007 37	–	–	–
150 010 94	150 017 01	150 017 67	–
150 001 84	standard	standard	standard
150 002 29	150 002 29	150 002 29	150 002 29
110 002 86	110 002 86	110 002 86	110 002 86
110 003 03	110 003 03	110 003 03	110 003 03
250 000 81	250 000 81	250 000 81	250 000 81
150 009 75	150 009 75	–	–
150 009 75	150 009 75	150 009 75	150 009 75
150 010 07	150 010 07	150 010 07	150 010 07

# Technical data

Description				for burner sizes	
				G5/GL5/RGL5	G7/GL7/RGL7
Burner motor 3~ 230/400 V		Type		D90/90-2	D112/110-2/1
Burner motor 3~ 400 V Δ		Type		-	-
Nominal rating		kW		1,5	3
Nominal load at 230/400 V		A		6,0/3,5	10,5/6
Nominal load at 400 V		A		-	-
Motor prefuse		A		10	16
Speed		1/min		2800	2900
Fan				galvanised	galvanised
Ignition transformer		Type		W-ZG02/2	W-ZG02/2
Burner control for					
- sliding two stage,					
- sliding three stage and					
modulating G, GL, and RGL burners		Type		LFL 1.322	LFL 1.322
Servomotor for gas operation					
- sliding two stage Z	(8 secs)	Type		-w- 1055/80	-w- 1055/80
- sliding two stage ZM	(20 secs)	Type		SQM 10.15562	SQM 10.15562
- modulating	(42 secs)	Type		SQM 10.16562	SQM 10.16562
Pump fitted		GL	Type	J6	J6
(only on dual fuel burners)		RGL	Type	J6	TA2
Oil solenoid valves	230V 1/8"	GL	Type	121 K 2423	121 K 2423
	230V 1/8"		Type	7121 ZBG1 KRT0	7121ZBG KRT0
	115V 1/4"	RGL	Type	121 K 6220	121 K 6220
	115V 1/8"		Type	121 K 2423	121 K 2423
	115V 3/8" (Flow)		Type	-	-
	115V 3/8" (Return)		Type	-	-
	230V 1/8"		Type	-	-
	230V 1/8"		Type	-	-
Oil pressure switch	1-10 bar	RGL	Type	900.2378 or DSA 46 F001	900.2378 or DSA 46 F001
Oil hoses DN/length			DN/mm	13/1000	13/1000 (GL) 20/1000 (RGL)
Weight					
Gas burner (without valve train)		approx. kg		55	76
Dual fuel burner (without valve train)		approx. kg		55	82

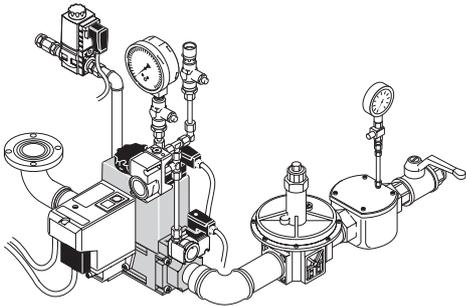
- ① Capacity of pump J7: up to 220 kg/h. over 220 kg/h TA2 pump at extra price.  
 ② With star delta start.

**Burner motor standard version: insulation class B<sub>trop</sub>, type of protection IP44**

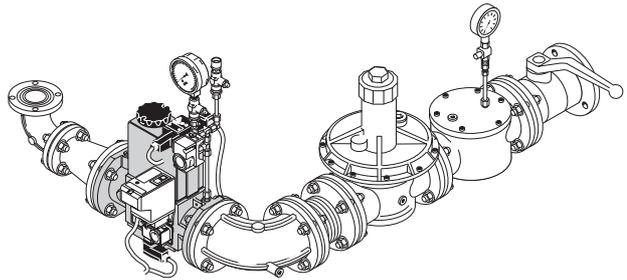
**Note:** If the supply pressure is >2,0 bar, pump E6 or E7 should be used instead of J6 or J7.

G8/GL8/RGL8	G9/GL9/RGL9	G10/RGL10	G11/RGL11
-	-	-	-
D112/140-2/1 4,8	D132/120-2a 6,5	D132/120-2 9,0	D132/150-2 12
-	-	-	-
9,5	13,5	18	23
25 (20) ②	35 (25) ②	50 (35) ②	63 (35) ②
2900	2900	2850	2850
galvanised W-ZG02/2	green W-ZG02/2	blue W-ZG02/2	blue W-ZG02/2
LFL 1.322	LFL 1.322	LFL 1.322	LFL 1.322
-w- 1055/80 SQM 10.15562 SQM 10.16562	- SQM 10.15562 SQM 10.16562	- SQM 10.15562 SQM 10.16562	- SQM 10.15562 SQM 10.16562
J6 TA3	J6/J7/TA2 ① TA3	- TA3	- TA4
121 K 6220 7121ZBG1KRT0	121 K 6220 121 K 2423	- -	- -
-	-	-	-
321 H 2322 121 G 2320 121 K 2423 122 K 9321	321 H 2322 121 G 2320 121 K 2423 122 K 9321	321 H 2322 121 G 2320 121 K 2423 122 K 9321	321 H 2322 121 G 2320 121 K 2423 122 K 9321
900.2378 or DSA 46 F001			
13/1000 (GL) 20/1000 (RGL)	13/1000 (GL) 20/1000 (RGL)	20/1000 (RGL)	25/1300 (RGL)
85	130	131	157
91	136	137	167

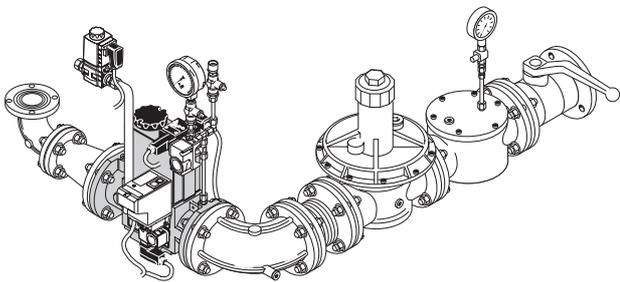
# Installation example



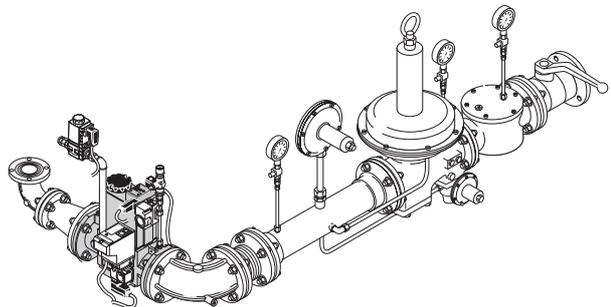
Low pressure supply - screwed valve train with DMV valves



Low pressure supply - flanged valve train with DMV valves without ignition gas



Low pressure supply - flanged valve train with DMV valves with ignition gas



High pressure supply - flanged valve train with DMV valves with ignition gas

The installation examples show the layout of a burner installation with basic valve train version, i.e. with DMV valves and other gas 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. The solenoid valve for ignition gas can be fitted on either side.

## Compensator

To ensure stress free fitting of the gas valve train, it is recommended that a compensator be fitted.

## Disconnection 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 expansion compensator, when one is fitted.

## Supporting the valve train

The valve trains must be suitably supported according to local conditions. For various valve train supports see Weishaupt accessories list.

## Gas meter

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

# Weishaupt MCR technology

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## Weishaupt control panels for

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

The basic control panels contain all burner controls, that means all inbuilt switchgear 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 MCR technology for

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

Together with ist core business of burners and heating systems, Weishaupt are able to offer complex control technology up to BMS level with SPS and DDC systems.

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

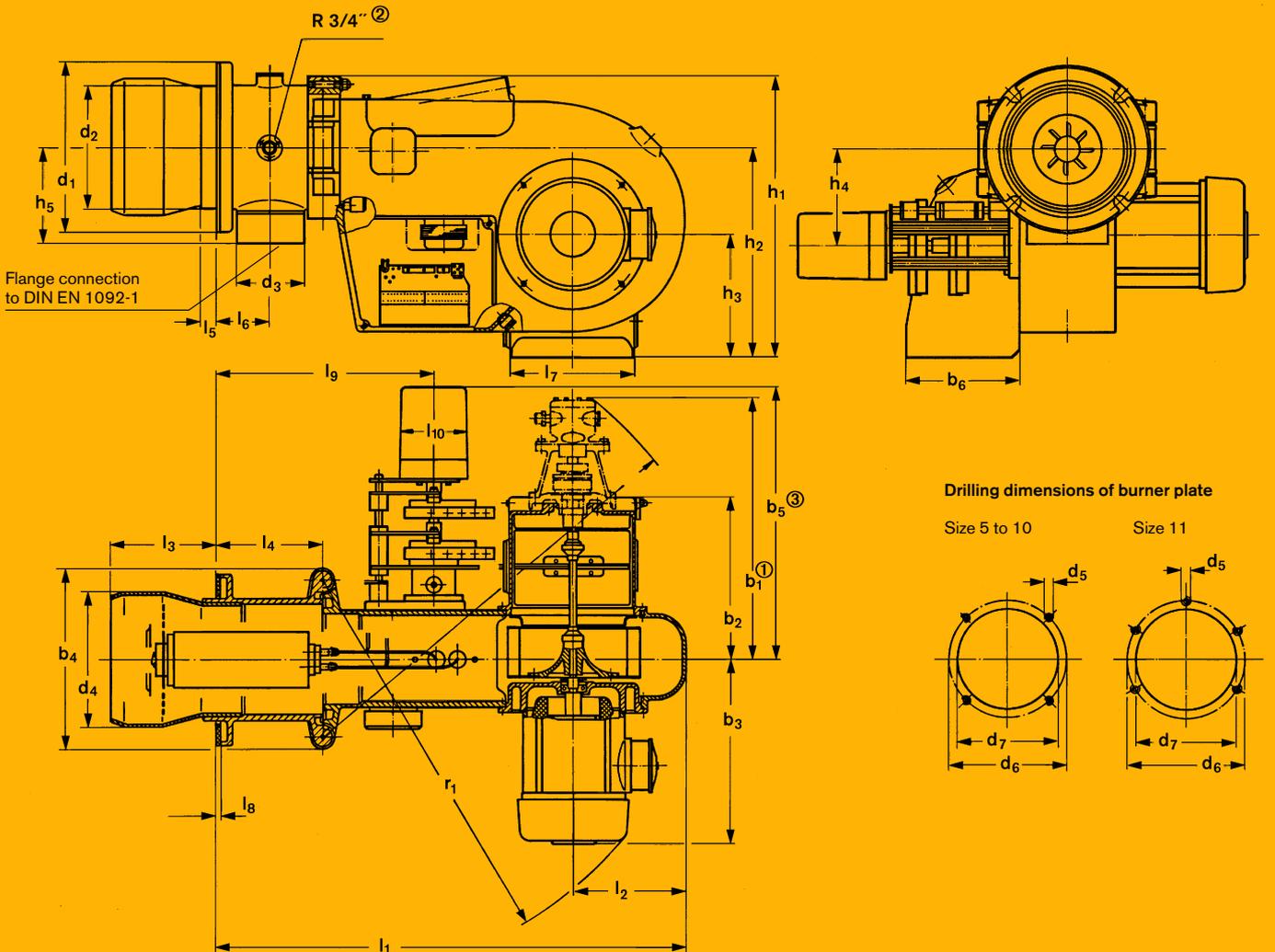
# Dimensions

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www.weishaupt.de

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Neachells Lane, Willenhall, WV13 3RG  
Tel: (01902) 609841, Fax: (01902) 633343

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Size	Dimension in mm															
	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	l <sub>8</sub>	l <sub>9</sub> <sup>⑤</sup>	l <sub>9</sub> <sup>⑥</sup>	l <sub>10</sub> <sup>⑤</sup>	l <sub>10</sub> <sup>⑥</sup>	b <sub>1</sub> <sup>①</sup>	b <sub>2</sub>	b <sub>3</sub>	b <sub>4</sub>
5	868	200	200	208	42	108	238	8	421	451	110	120	468	278	310	312
7	965	225	230	228	52	118	251	8	484	514	110	120	522	326	330	355
8	965	225	230	228	52	118	251	8	484	514	110	120	522	326	370	355
9	1158	300	233	248	62	128	391	8	–	523	–	120	560	357	425	490
10	1158	300	233	248	62	128	391	8	–	523	–	120	560	357	425	490
11	1198	300	271	288	82	148	391	8	–	563	–	120	564	357	454	490
	b <sub>5</sub> <sup>③</sup>	b <sub>6</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub>	d <sub>7</sub>	r <sub>1</sub>	r <sub>2</sub> <sup>①</sup>
5/1	465	200	494	373	220	195	162	260	195	DN50	200	M10	235	210	680	800
5/2	465	200	494	373	220	195	162	260	195	DN50	215	M10	235	220	680	800
7	485	229	560	415	245	195	182	330	235	DN65	250	M12	298	270	720	840
8	485	229	560	415	245	195	182	330	235	DN65	265	M12	298	270	740	840
9	515	229	675	482	260	200	212	380	300	DN80	325	M12	330	305	960	1065
10	515	229	675	482	260	200	212	380	300	DN80	325	M12	330	305	960	1065
11	515	229	675	482	260	200	272	450	340	DN100	380	M12	400	385/ 360 <sup>④</sup>	990	1065

Dimensions are approximate, we reserve the right to make changes in light of further development.

② Ignition gas connection on burner sizes 8 to 11 either side.

④ Burner head can only be removed with boiler plate

③ Dimensions apply to RGL burners - dimension 70 mm less for G and GL burners version ZM and 180 mm less for version Z

⑤ Dimensions apply to two stage Z burners

① with electromagnetic clutch (pump without magnetic clutch less 115 mm)

⑥ Dimensions apply to sliding two stage ZM burners