

VALUPAK®-II low temperature burners

TECHNICAL INFORMATION

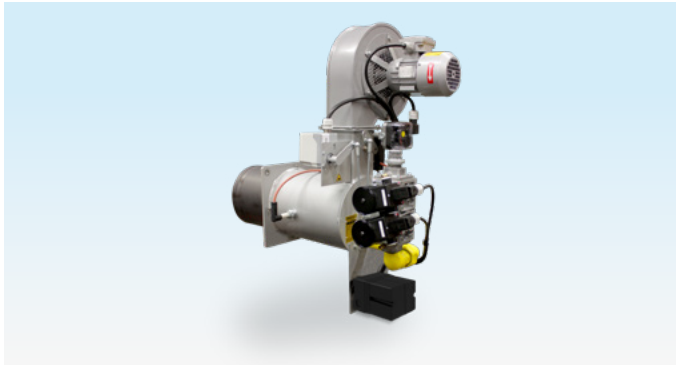
- High turndown
- Available in 5 sizes
- Capacities 2 kW–950 kW (LHV)
- Stable and clean combustion
- Suitable for UV scanner and flame rod
- Low gas pressure requirements
- Ease of installation and operation with low maintenance requirements
- All metal construction
- Multi voltage and frequency blower motors
- Better control on CO over the entire turndown of the burner
- Pilot connection availability
- Easily switch between natural gas and propane



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1 Application



VALUPAK-II is designed for process air heating applications.

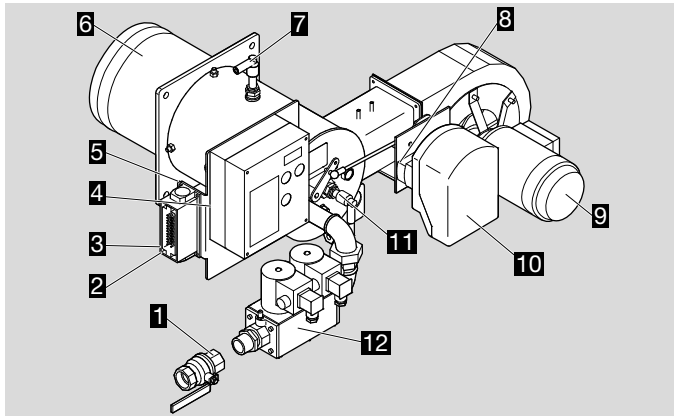
Like many other Honeywell products, the standard VALUPAK-II burner can be customized into a package which could include a gear motor, burner controls, automatic shut-off valves, flame sensors and/or pressure switches.

Specifically designed for applications where burners are used under balanced pressure conditions such as in textile machines, printing machines and many other types of dryers. When firing with heat exchangers, the VALUPAK-II design reduces the tendency for resonance.

1.1 Options

- Round air filter
- Single phase motor for sizes 60, 150 and 300
- Long discharge sleeve 300 mm
- Control motor
- Flame rod or UV scanner
- Pilot connection

1.2 Application examples



Legend:

- 1** Cock
- 2** Housing
- 3** Male insert
- 4** Flame safeguard + Ignition transformer
- 5** Mounting bracket
- 6** Gasburner
- 7** Ignition terminal cap
- 8** Aptaptor set for control motor
- 9** Blower
- 10** Control motor
- 11** Flame rod
- 12** Double shut-off valve

2 Certification

2.1 Eurasian Customs Union



The products VALUPAK-II meet the technical specifications of the Eurasian Customs Union.

3 Function

A motorized gas control valve controls the heat output of the burner over the full operating range. The gas flows through the nozzle and then along the inside of the burner cone where combustion air is progressively and tangentially mixed with the gas. This results in a short, very stable flame and clean combustion.

4 Selection

4.1 VP-II-60 to VP-II-900, 50 Hz operation

Gross heating value = 10.9 kWh/m³ (st), d = 0,6
All figures are for balanced - 0 mbar - duct pressure¹⁾
For more operating data, see Technical data, page 16 (6.2 VP-II burner specification, 50 Hz).

Burner	VP-II-60 ²⁾			VP-II-150 ²⁾		
Blower	UHC102	UHC122	UMI300	UHC122	UMI300 ⁴⁾	EB ³⁾ 20 mbar
Maximum heat release ⁵⁾ [kW] (HHV)	40	60	80	185	225	417
Minimum heat release [kW] (HHV)	2	2	3	6	6	9

Burner	VP-II-300 ²⁾			VP-II-600		VP-II-900	
Blower	UMI300 ⁴⁾	UMI390	EB ³⁾ 20 mbar	UHC182 ²⁾	UHC202	UHC182 ²⁾	UHC202
Maximum heat release ⁵⁾ [kW] (HHV)	290	360	633	558	634	880	1060
Minimum heat release [kW] (HHV)	6	10	12.6	15	15	15	15

- 1) Air pressure switches should be selected to have a setpoint ranging from 2-10 mbar.
- 2) Single phase blower motor available.
- 3) The EB Valupak II requires an external blower with flat characteristics.
- 4) As an alternative blower U/HC142 (0,18 kW) can be used. Performance is the same as with UMI300 blower.
- 5) Use of the standard round air inlet filter will cause a ± 15% capacity reduction. UMI blowers are not suited for filters.

4.2 VP-II-60 to VP-II-900, 60 Hz operation

Gross heating value = 10.9 kWh/m³ (st), d = 0,6
All figures are for balanced - 0 mbar - duct pressure¹⁾

For more operating data, see Technical data, page 18 (6.3 VP-II burner specification, 60 Hz).

Burner	VP-II-60 ²⁾			VP-II-150 ²⁾		
Blower	UHC102	UHC122	UMI300	UHC122	UMI300 ⁴⁾	EB ³⁾ 20 mbar
Maximum heat release ⁵⁾ [kW] (HHV)	40	60	80	222	270	417
Minimum heat release [kW] (HHV)	2	2	3	6	6	9

Burner	VP-II-300 ²⁾			VP-II-600		VP-II-900	
Blower	UMI300 ⁴⁾	UMI390	EB ³⁾ 20 mbar	UHC182 ²⁾	UHC202	UHC182 ²⁾	UHC202
Maximum heat release ⁵⁾ [kW] (HHV)	348	432	633	670	761	1060	1272
Minimum heat release [kW] (HHV)	6	10	12.6	15	15	15	15

- 1) Air pressure switches should be selected to have a setpoint ranging from 2-10 mbar.
2) Single phase blower motor available.
3) The EB Valupak II requires an external blower with flat characteristics.
4) As an alternative blower U/HC142 (0,18 kW) can be used. Performance is the same as with UMI300 blower.
5) Use of the standard round air inlet filter will cause a ± 15% capacity reduction. UMI blowers are not suited for filters.

4.3 Selection table

Description	Code	Availability					Remark
		VPII-60	VP-II-150	VP-II-300	VP-II-600	VP-II-900	
Blower type							
UHC102		UHC102					
UHC122		UHC122	UHC122				
UHC142				UHC142			
UHC182					UHC182	UHC182	
UHC202					UHC202	UHC202	
UMI300			UMI300	UMI300			
UMI390				UMI390			
Spark igniter orientation							
Left (standard position)	L	•	•	•	•	•	
Right	R	•	•	•	•	•	
Up = blower side (not VALUPAK II-60)	U	•	•	•	•	•	
Down = opposite of the blower	D	•	•	•	•	•	
Fuel							
Natural gas	C1	•	•	•	•	•	
LPG	C3	•	•	•	•	•	
Flame supervision							
No flame detection device	00	•	•	•	•	•	
Flame rod	FR	•	•	•	•	•	Included in configuration.
Provision for scanner	UV	•	•	•	•	•	Not included in configuration. The scanner must be ordered seperatly.
Oven wall gasket							
No gasket	0	•	•	•	•	•	
Gasket included	1	•	•	•	•	•	
Blower motor voltage							
Standard motor: 230–480 V 50–60 Hz	ST	•	•	•	•	•	
Single phase, Poles 2, 230 V, 50 Hz	SP	•	•	•	•	•	Not available for UHC202
3 x 460 V, 60 Hz, UL listed	UL	•	•	•	•	•	
On Request	OR	•	•	•	•	•	No blower is included. In this case the configured burner is identical to the EB version. See page 15 (6 Technical data).

4 Selection

Description	Code	Availability					Remark
		VPII-60	VP-II-150	VP-II-300	VP-II-600	VP-II-900	
Air filter							
No filter	00000	●	●	●	●	●	
Filter for blower UHC102	FL100	●	●	●	●	●	
Filter for blower UHC122	FL110	●	●	●	●	●	
Filter for blower UHC142	FL120	●	●	●	●	●	
Filter for blower UHC182	FL140	●	●	●	●	●	
Filter for blower UHC202	FL150	●	●	●	●	●	
Discharge sleeve length							
Sleeve with length of 150 mm	1	●	●	●	●	●	
Sleeve with length of 200 mm	2	●	●	●	●	●	
Sleeve with length of 300 mm	3	●	●	●	●	●	
Sleeve with length of 400 mm	4	●	●	●	●	●	

Example

VP-II-60-UHC102LC1000ST000002

5 Project planning information

5.1 General

Blowers

All Valupak-II burner types can have different blowers depending on the requested maximum capacity. See page 9 (4.3 Selection table).

- Valupak-II 60: UHC102, UHC122 and UMI300
- Valupak-II 150: UHC122 and UMI300
- Valupak-II 300: UMI300, UMI390 and UHC142 (to be used as replacement for the UMI300 if a filter is required)
- Valupak-II 600/900: UHC182 and UHC202.

An optional filter are only available on UHC blowers not on UMI blowers. See page 21 (6.5 Dimensions).

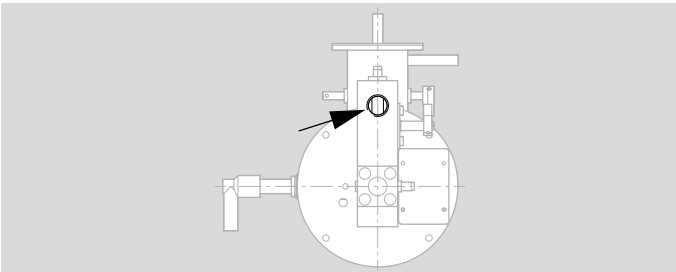
Pilot connections

Optional pilot connection, closed by test connection if direct ignition. No pilot connection available on the Valupak II-60. This small burner size can only be ignited by direct ignition.

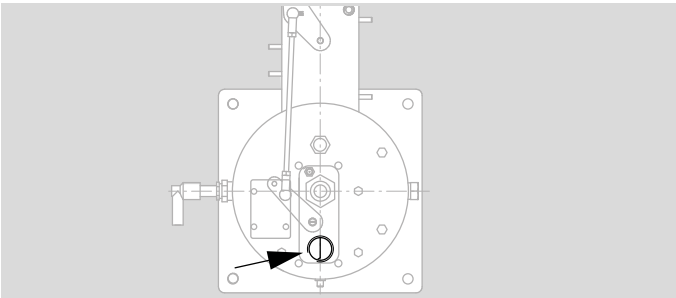
5.2 Gas inlet connection

Gas connections are NPT = allowed in Europe, mandatory in USA and Canada.

VALUPAK-II	Gas inlet
60	1/2" NPT
150	3/4" NPT
300, 600, 900	1" NPT



VALUPAK-II 60



VALUPAK-II 150-900

5.2.1 Gas inlet pressure and gas inlet test connection

VP-II-60

To avoid incorrect air gas ratio, the total Δp over the pipe train on max capacity shall not exceed about 50% of the gas inlet pressure at burner inlet.

A test connection to measure the gas inlet pressure to the burner is not available on the burner itself or is not reliable but shall be made available in the pipe train (second shut off valve outlet or max gas pressure switch can provide this test connection).

VP-II-150–900

For the smallest burner type the total Δp over the pipe train must be < 2 mbar. Therefore, it's advised to use a gas pressure regulator, e. g. GDJ or an alternative to allow a correct setting of low gas pressure for LPG!

5.2.2 ProFi

A web app selecting the correct product is available at www.adlatus.org.

5.3 VP-II firing on different fuels

Valupak-II burners are capable to fire on natural gas and LPG.

VP-II-60

VP-II-60 with a UHC122 and a UMI300 blower can fire on both natural gas and LPG without any modification.

VP-60 with a UHC102 blower needs a different air butterfly for LPG firing. The LPG burner can also be fired on NG **but with higher CO** (CO turn down reduces to $< 1/2!$).

VP-II-150–900

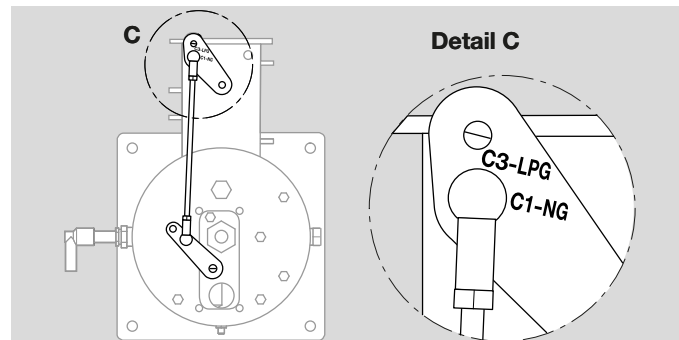
For this range of Valupak II burners no material change is required to change from fuel. Only the air/gas linkage must be changed from connecting hole in the air butterfly crank. The respective connecting holes are indicated on the crank as follows:

- **C1-NG** = natural gas
- **C3-LPG** = LPG

5.3.1 Replace air/gas linkage

When changing from NG to LPG firing the air/gas linkage must be replaced from the linkage connecting hole **C1-NG** in the air butterfly crank to the connecting hole **C3-LPG** in the same air butterfly crank and vice versa for the change from LPG to NG.

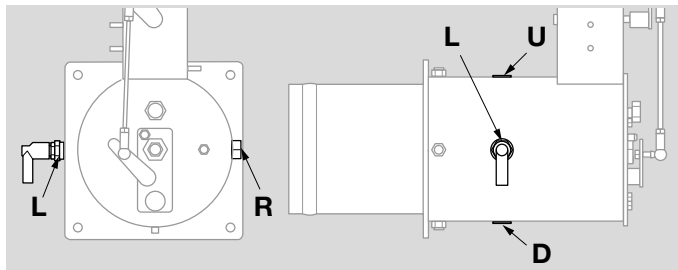
When changing from NG to LPG, supply gas pressure needs to be lowered.



5.4 Spark ignitor orientation

The spark igniter can be mounted in 4 different positions on the burner housing (seen from the back of the burner): left (standard position), right, up (blower side) and bottom (if the air inlet is on top). VP-II-60 has only 3 different positions. There's no up connection (to the blower side), only left, right and bottom/down.

All spark ignitor arrangements = 1/2" NPT connection.



VP-II-60-900

Legend:

L: Left (standard position)

R: Right

U: Up = blower side (not VP-II-60)

D: Down = opposite of the blower

5.5 Installation position

Burner may be mounted in any position suitable for automatic control motor and UV scanner.

5.6 Burner mounting

Burner will typically be installed through an oven wall or insulated air duct. Cut opening at least 25 mm larger in diameter than discharge sleeve to allow for sleeve expansion.

Additional burner support may be required in conjunction with a stiffener plate to support burner package weight (20–25 kg). Four 13 mm diameter holes into panels flange accept 10 mm stud bolts welded to panels or stiffener.

5.7 Flame supervision

Both flame supervision, flame rod and UV scanner, can be used for VP-II-150–900. Please note the following requirements.

VP-II-60

A reliable flame signal can only be obtained with a flame rod. The flame signal by UV scanner is too weak especially in the lower capacity ranges.

VP-II-150–900

To get a reliable flame signal a small amount of purge air is recommended (0,5–1 m³/hr).

VP-II-900

A flame rod can only be used on natural gas firing. On LPG firing there is a risk for soot formation on the rod. For LPG firing only a UV-scanner can be used.

The recommended adjusting dimension for the flame rod arrangement shall be respected.

5.8 VALUPAK package and back pressure

5.8.1 Stable back pressure

Burner capacity will depend on back-pressure.

VP-II-150–900: The standard package can be used with stable back pressure between -2.0 and +2.0 mbar except for VP-II-60.

VP-II-60: See the table below.

Back-pressure	Capacities kW (HHV)					
	VP-II-60 UHC102		VP-II-60 UHC122		VP-II-60 UMI300	
	min.	max.	min.	max.	min.	max.
< 2 mbar	not possible					
2 mbar	not possible		not possible		3	65
1 mbar	2	25	2	50	3	75
0 mbar	2	40	2	60	3	80
- 1 mbar	3	45	3	65	4	90
- 2 mbar	3	50	4	70	5	100
< - 2 mbar	Not advised, please contact HTS sales or customer contact.					

Once set for a specific back pressure:

- The package can fire stable on lower back pressures, but (min and max) capacity will increase, excess air will increase and higher CO/C_xH_y could be the result.
- The package cannot be used on higher back pressures: this would result in reduced air factor, possible below 1.0 (with longer flames, incomplete combustion etc.).

5.8.2 Variable back pressures

The burner can still be used but must be commissioned at highest possible back pressure.

- Reducing the back pressure will result in leaner gas/air ratio, combustion will still be reliable but with increased

CO and C_xH_y. But still stable, reliable and safe combustion.

- Increasing the back pressure (after commissioning) will result in excess.

5.8.3 Maximum/Minimum back pressure

Valupak burners are not intended to fire on high back pressure equipment – the burners have a mounting flange that is not capable of leak free closing the process connection at high back pressure conditions.

For processes that require leak tight burner mounting at higher back pressures, other burners shall be used.

For underpressure applications, this does not apply if it is allowed to leak ambient air in the process.

6 Technical data

Installation position: Burner may be mounted in any position suitable for automatic control motor and UV scanner.

Fuels: Natural gas and propane

Protection: IP 54

Burner package weight: 20–25 kg

Standard color is RAL 9006 (White aluminum)

6.1 Typical emissions

Firing with natural gas.

VP-II-60

CO can be below 50 mg/Nm³ at 17% O₂ for capacities from 15 kW to maximum capacity (only possible with well protected flame).

NO_x is typically below 40 mg/Nm³ at 17% O₂ (= 180 mg/Nm³ at 3% O₂).

VP-II-150–900

CO can be below 25 mg/Nm³ at 17% O₂ for capacities above 20% nominal capacities (only possible with well protected flame).

NO_x is typically between 25 and 40 mg/Nm³ at 17% O₂ (= 120 and 180 mg/Nm³ @ 3% O₂).

6.2 VP-II burner specification, 50 Hz

Capacity and selection data in kW, 50 Hz operation. Gross heating value = 10.9 kWh/m³ (st), d = 0,6

All figures are for balanced - 0 mbar - duct pressure¹⁾

Burner	VP-II-60 ²⁾			VP-II-150 ²⁾		
Blower	UHC102	UHC122	UMI300	UHC122	UMI300 ⁴⁾	EB ³⁾ 20 mbar
Maximum heat release ⁵⁾ [kW] (HHV)	40	60	80	185	225	417
Minimum heat release [kW] (HHV)	2	2	3	6	6	9
Pilot capacity (typical) [kW] (HHV)	NA			26	32	59
Turndown ¹⁾	20:1	30:1	27:1	31:1	38:1	44:1
Q gas _{max.} [m ₃ /h(st)]	3.7	5.5	7.3	17.9	21.8	40.4
Q gas _{min.} [m ₃ /h(st)]	0,18	0,18	0,28	0,6	0,6	0,9
Q air _{max.} [m ₃ /h(st)]	48	64	98	206	251	465
Q air _{min.} [m ₃ /h(st)]	NA			53	67	116
Excess air at max. (n)	1.17	1.17	1.17	1.2	1.2	1.2
Excess air at min. (n)	NA			9.5	12	13.2
Flame length at max. capacity (open air) ⁶⁾ [m]	up to 0.4 (after sleeve)			1	1	1.8
Δp gas max. at burner inlet [mbar]	6.7	11.5	24	14.2	20.8	71.5
Δp gas max. at burner test connection (typical) [mbar]	5.4	9	18	9.8	14.6	50.3
Δp gas max.at pilot connection [mbar]	NA			18	27	93
Air diff. pressure at test connection						
at maximum heat release [mbar]	2	3,3	6,3	2.6	4,4	15.2
at minimum heat release [mbar]	0.4	0.5	0.6	0.15	0.25	-
CO turn down, typical (ref. 100 mg/m ³ at 17% O ₂)	NA			30:1	22:1	4:1
Torque gas-air linkage [Nm]	NA			0.3	0.3	0.5
Lp at 1 m blower, max. capacity ⁷⁾ [dB(A)]	NA			86	86	-
Lw at max. capacity ⁷⁾ [dB(A)]	NA			94	94	-
Weight [kg]	13	14.2	18	20	24.2	15
Blower motor [kW]	0.09	0.09	0.25	0.09	0.25	0.55

Burner	VP-II-300 ²⁾			VP-II-600		VP-II-900	
Blower	UMI300 ⁴⁾	UMI390	EB ³⁾ 20 mbar	UHC182 ²⁾	UHC202	UHC182 ²⁾	UHC202
Maximum heat release ⁵⁾ [kW] (HHV)	290	360	633	558	634	880	1060

6 Technical data

Burner	VP-II-300 ²⁾			VP-II-600		VP-II-900	
Blower	UMI300 ⁴⁾	UMI390	EB ³⁾ 20 mbar	UHC182 ²⁾	UHC202	UHC182 ²⁾	UHC202
Minimum heat release [kW] (HHV)	6	10	12.6	15	15	15	15
Pilot capacity (typical) [kW] (HHV)	23	29	51	37	42	41	49
Turndown ¹⁾	48:1	36:1	50:1	37:1	42:1	59:1	71:1
Q gas max. [m ₃ /h(st)]	28.1	34.8	61.3	54.0	61.4	85.2	102.6
Q gas min. [m ₃ /h(st)]	0.6	1.0	1.2	1.5	1.5	1.5	1.5
Q air max. [m ₃ /h(st)]	323	401	706	622	707	981	1133
Q air min. [m ₃ /h(st)]	55	72	117	144	174	205	230
Excess air at max. (n)	1.2	1.2	1.2	1.2	1.2	1.2	1.15
Excess air at min. (n)	9.9	7.8	10	10.3	12.5	14.7	16.5
Flame length at max. capacity (open air) ⁶⁾ [m]	1.3	1.5	2.3	1.6	1.7	2	2.2
Δp gas max. at burner inlet [mbar]	10.8	15.2	46.7	16.2	20.8	23.9	33.9
Δp gas max. at burner test connection (typical) [mbar]	5	7.7	23.5	10.2	12.9	5.2	7.4
Δp gas max. at pilot connection [mbar]	17	27	83	17.6	23	35	51
Air diff. pressure at test connection							
at maximum heat release [mbar]	3.7	6.5	18.5	6.9	9.7	6.6	8.4
at minimum heat release [mbar]	0.2	0.2	-	0.45	0.6	0.4	0.5
CO turn down, typical (ref. 100 mg/m ³ at 17% O ₂)	30:1	25:1	17:1	12:1	10:1	20:1	15:1
Torque gas-air linkage [Nm]	0.3	0.3	0.5	1	1	1	1
Lp at 1 m blower, max. capacity ₇₎ [dB(A)]	86	92	-	96	99	96	99
Lw at max. capacity ₇₎ [dB(A)]	94	98	-	102	105	102	105
Weight [kg]	29.7	31.5	20.5	47.6	55	70.4	78
Capacity blower motor [kW]	0.25	0.55	0.75	1.1	1.5	1.1	1.5

1) Air pressure switches should be selected to have a setpoint ranging from 2-10 mbar.

2) Single phase blower motor available.

3) The EB Valupak II requires an external blower with flat characteristics.

4) As an alternative blower U/HC142 (0,18 kW) can be used. Performance is the same as with UMI300 blower.

5) Use of the standard round air inlet filter will cause a ± 15% capacity reduction. UMI blowers are not suited for filters.

6) When firing in open air. Firing in a cross flow shortens the flame.

7) Sound data refers to open firing burner in free field of conditions, at maximum capacity.

6.3
VP-II burner specification, 60 Hz

Capacity and selection data in kW, 60 Hz operation. Gross heating value = 10.9 kWh/m³ (st), d = 0,6
All figures are for balanced - 0 mbar - duct pressure¹⁾

Burner	VP-II-60 ²⁾			VP-II-150 ²⁾		
Blower	UHC102	UHC122	UMI300	UHC122	UMI300 ⁴⁾	EB ³⁾ 20 mbar
Maximum heat release ⁵⁾ [kW] (HHV)	40	60	80	222	270	417
Minimum heat release [kW] (HHV)	2	2	3	6	6	9
Pilot capacity (typical) [kW] (HHV)	NA			32	38	59
Turndown ¹⁾	20:1	30:1	27:1	37:1	45:1	44:1
Q gas max. [m³/h(st)]	3.7	5.5	7.3	21.5	26.1	40.4
Q gas min. [m³/h(st)]	0.18	0.18	0.28	0,6	0,6	0,9
Q air max. [m³/h(st)]	48	64	98	248	301	465
Q air min. [m³/h(st)]	NA			64	73	116
Excess air at max. (n)	1.17	1.17	1.17	1.2	1.2	1.2
Excess air at min. (n)	NA			11.4	13.1	13.2
Flame length at max. capacity (open air) ⁶⁾ [m]	up to 0.4 (after sleeve)			1	1.2	1.8
Δp gas max. at burner inlet [mbar]	6.7	11.5	24	20.5	30.2	71.5
Δp gas max. at burner test connection (typical) [mbar]	5.4	9	18	14.2	21.2	50.3
Δp gas max.at pilot connection [mbar]	NA			27	39	93
Air diff. pressure at test connection						
at maximum heat release [mbar]	2	3.3	6.3	3.7	6.3	15.2
at minimum heat release [mbar]	0.4	0.5	0.6	-	-	-
CO turn down, typical (ref. 100 mg/m³ at 17% O₂)	NA			30:1	22:1	4:1
Torque gas-air linkage [Nm]	NA			0.3	0.3	0.5
Lp at 1 m blower, max. capacity ⁷⁾ [dB(A)]	NA			90	90	-
Lw at max. capacity ⁷⁾ [dB(A)]	NA			98	98	-
Weight [kg]	13	14.2	18	20	24.2	15
Blower motor [kW]	0.09	0.09	0.25	0.09	0.29	0.55

Burner	VP-II-300 ²⁾			VP-II-600		VP-II-900	
Blower	UMI300 ⁴⁾	UMI390	EB ³⁾ 20 mbar	UHC182 ²⁾	UHC202	UHC182 ²⁾	UHC202
Maximum heat release ⁵⁾ [kW] (HHV)	348	432	633	670	761	1060	1272

6 Technical data

Burner	VP-II-300 ²⁾			VP-II-600		VP-II-900	
Blower	UMI300 ⁴⁾	UMI390	EB ³⁾ 20 mbar	UHC182 ²⁾	UHC202	UHC182 ²⁾	UHC202
Minimum heat release [kW] (HHV)	6	10	12.6	15	15	15	15
Pilot capacity (typical) [kW] (HHV)	28	35	51	44	50	49	59
Turndown ¹⁾	58:1	43:1	50:1	45:1	51:1	71:1	85:1
Q gas max. [m³/h(st)]	33.7	41.8	61.3	64.8	73.6	102.6	123.1
Q gas min. [m³/h(st)]	0.6	1.0	1.2	1.5	1.5	1.5	1.5
Q air max. [m³/h(st)]	388	482	706	747	848	1133	1418
Q air min. [m³/h(st)]	64	82	117	148	209	230	276
Excess air at max. (n)	1.2	1.2	1.2	1.2	1.2	1.15	1.2
Excess air at min. (n)	11.4	8.8	10	10.6	15	16.5	19.8
Flame length at max. capacity (open air) ⁶⁾ [m]	1.5	1.7	2.3	1.9	2.3	2.2	2.3
Δp gas max. at burner inlet [mbar]	15.5	21.6	46.7	23.4	29.9	33.9	48.8
Δp gas max. at burner test connection (typical) [mbar]	7.2	10.9	23.5	14.7	18.5	7.4	10.7
Δp gas max.at pilot connection [mbar]	25	39	83	25	33	51	74
Air diff. pressure at test connection							
at maximum heat release [mbar]	5.3	8.6	18.5	9.9	14	8.4	12.2
at minimum heat release [mbar]	-	-	-	0.6	0.9	0.5	0.7
CO turn down, typical (ref. 100 mg/m³ at 17% O ₂)	25:1	20:1	17:1	10:1	8:1	15:1	12:1
Torque gas-air linkage [Nm]	0.3	0.3	0.5				
Lp at 1 m blower, max. capacity ⁷⁾ [dB(A)]	90	96	-	100	103	100	103
Lw at max. capacity ⁷⁾ [dB(A)]	98	102	-	106	109	106	109
Weight [kg]	29.7	31.5	20.5	47.6	55	70.4	78
Capacity blower motor [kW]	0.29	0.55	0.75	1.1	1.5	1.1	1.5

1) Air pressure switches should be selected to have a setpoint ranging from 2-10 mbar.

2) Single phase blower motor available.

3) The EB Valupak II requires an external blower with flat characteristics.

4) As an alternative blower U/HC142 (0,18 kW) can be used. Performance is the same as with UMI300 blower.

5) Use of the standard round air inlet filter will cause a ± 15% capacity reduction. UMI blowers are not suited for filters.

6) When firing in open air. Firing in a cross flow shortens the flame.

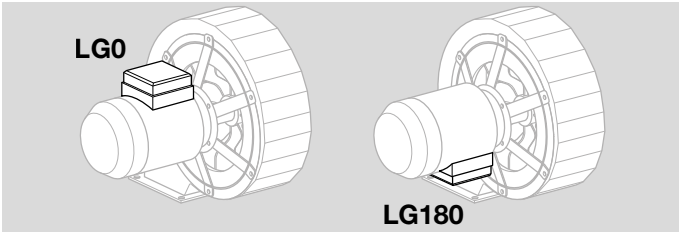
7) Sound data refers to open firing burner in free field of conditions, at maximum capacity.

6.4 Blower specification

Blower	UHC102	UHC122	UHC142	UHC182	UHC202	UMI300		UMI390	
Orientation	LG0	LG0	LG0	LG180	LG0	LG180	LG0	LG180	LG0
Capacity (kW)	0.09	0.09	0.18	1.1	1.5	0.25	0.25	0.55	0.55
Voltage (V)	230–480								
Frequency (Hz)	50–60								
Phase	Triphase								

6.4.1 Blower orientation

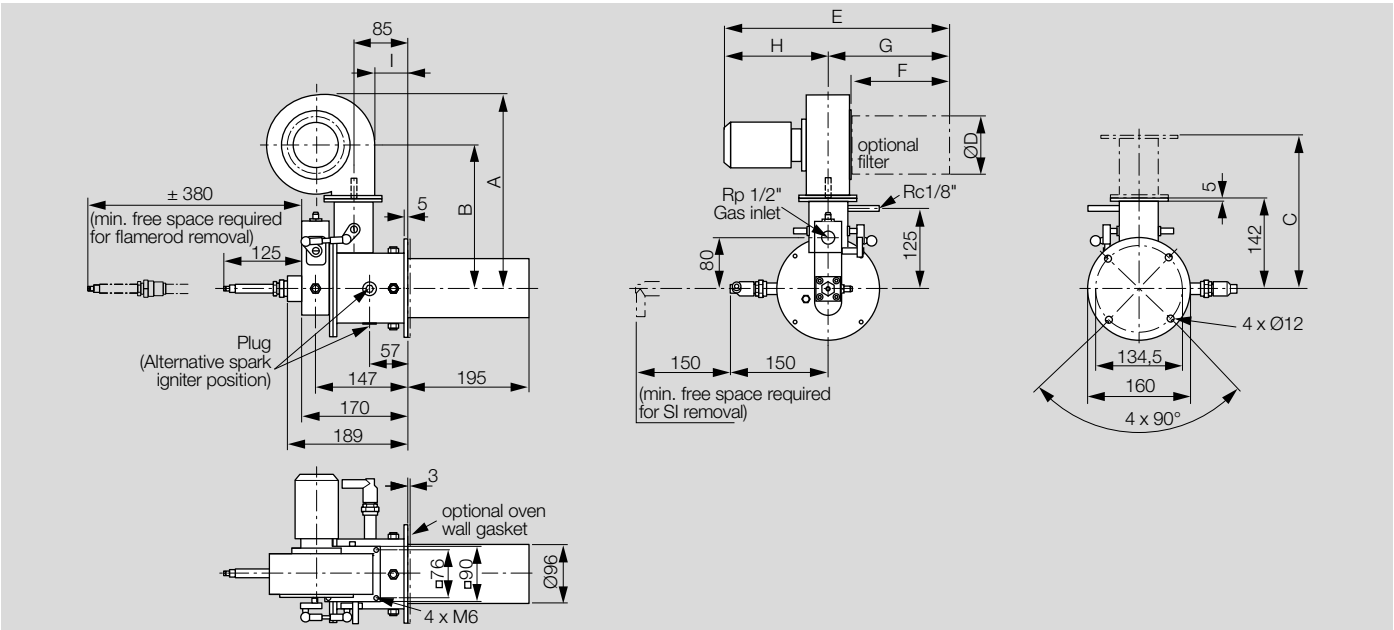
All configured burners include a blower with a LG0 orientation: L = Left (standard position). This is with the terminal box of the blower motor opposite to the blower outlet. Other orientations are available on request.



LG180 = terminal box of the motor at the blower outlet side.
LG0 = terminal box of the motor at the opposite side of the blower outlet.

6.5 Dimensions

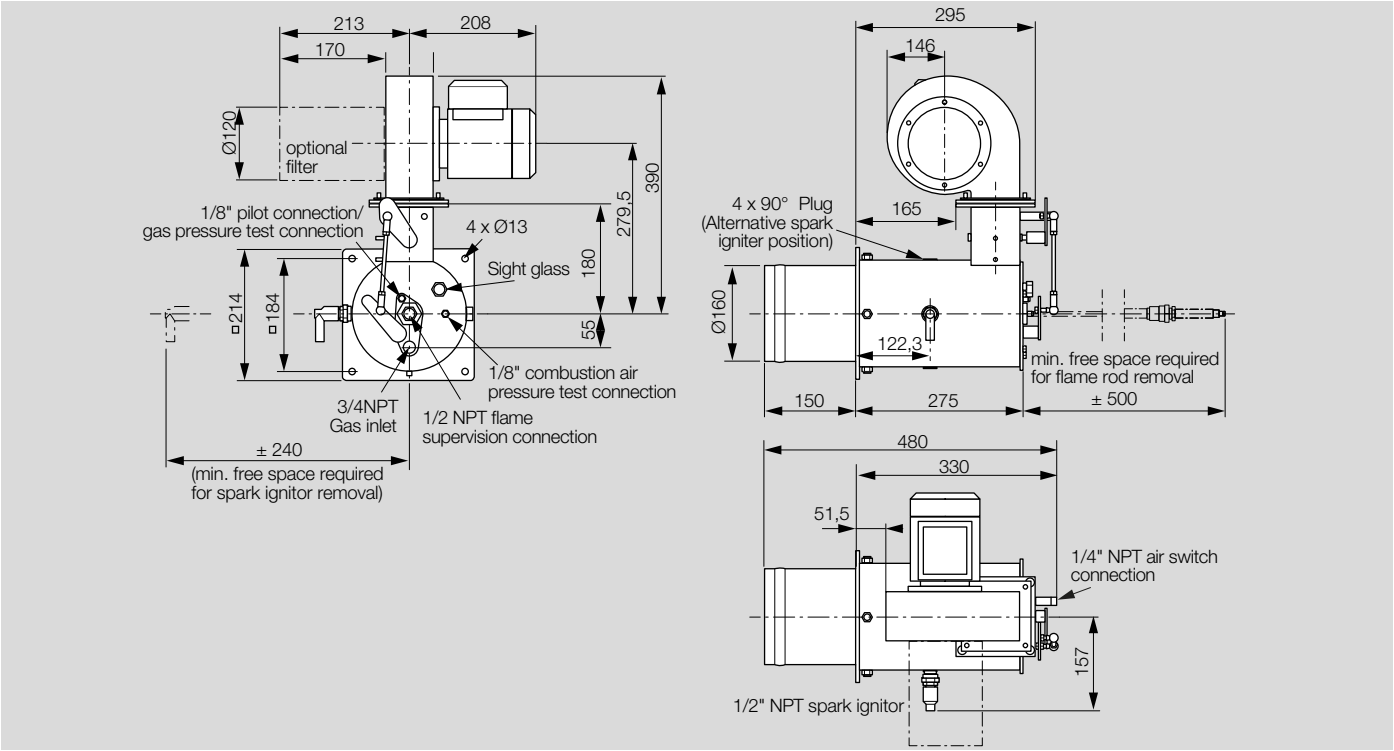
6.5.1 VP-II-60UHC102, VP-II-60UHC122 [mm]



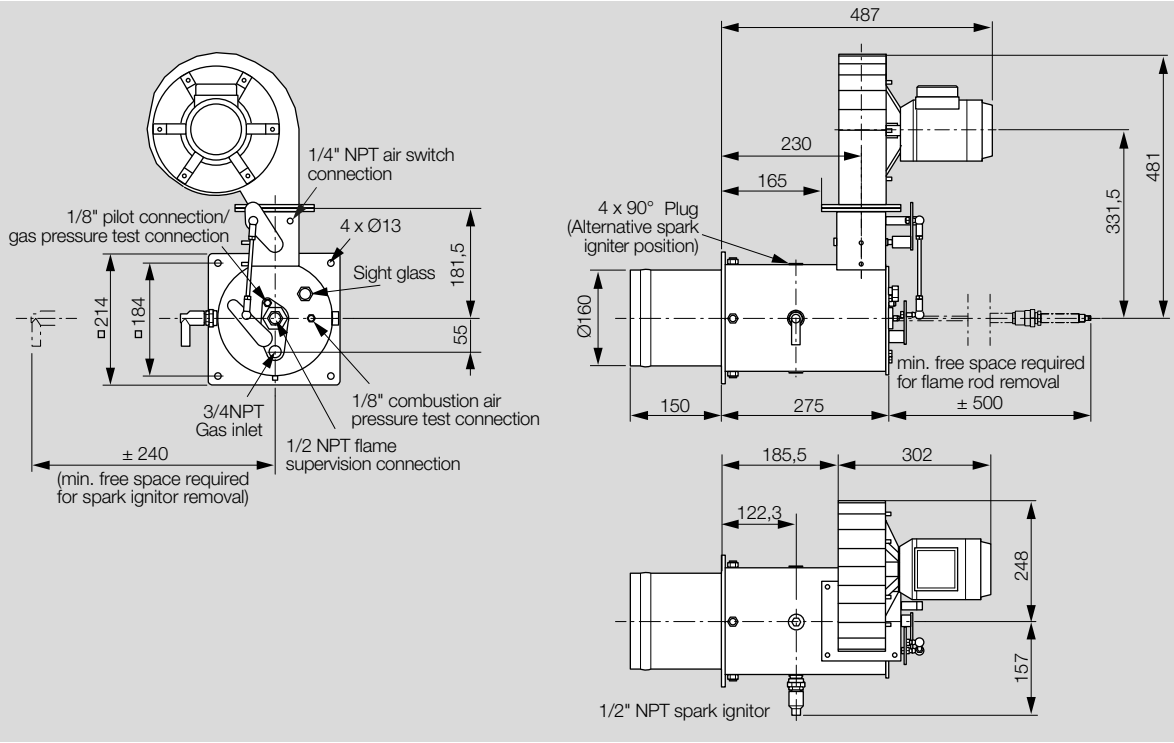
Blower	A	B	C	ØD	E	F	G	H	I
UHC102	302	224	–	Ø90	350	150	188	162	–
UHC122	442	331	238	Ø120	421	173	213	208	45,3



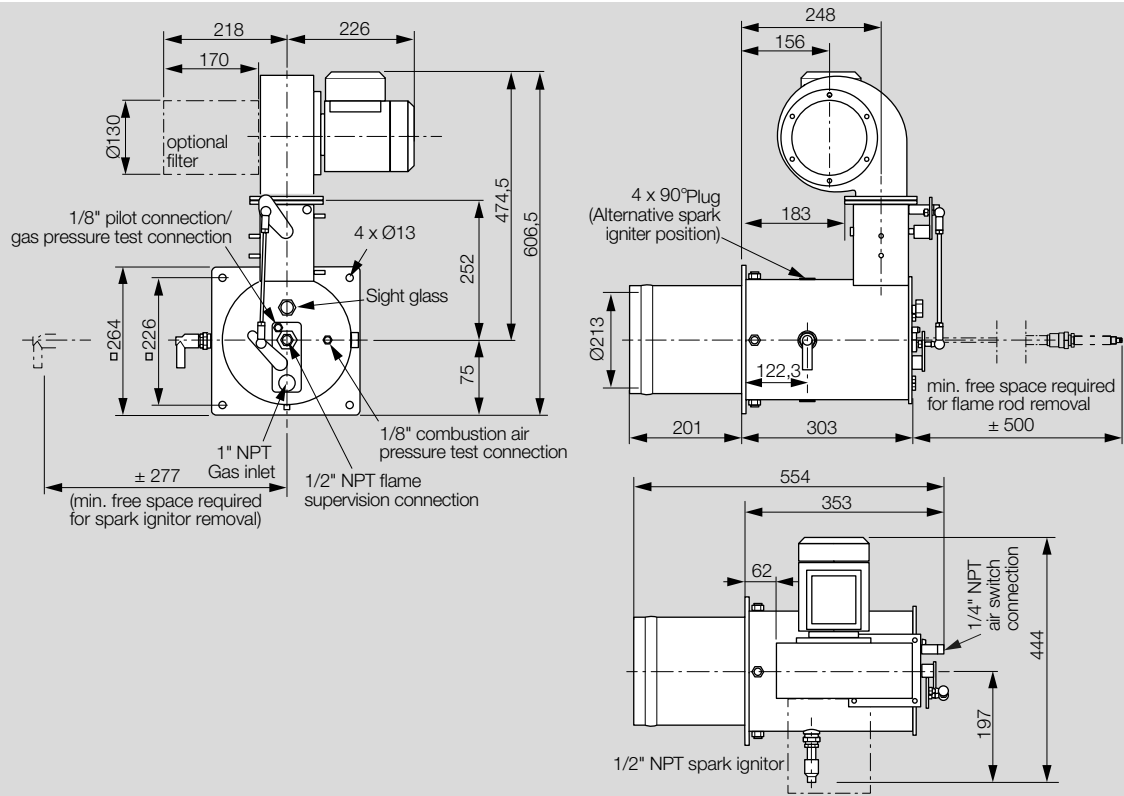
6.5.3 VP-II-150UHC122 [mm]



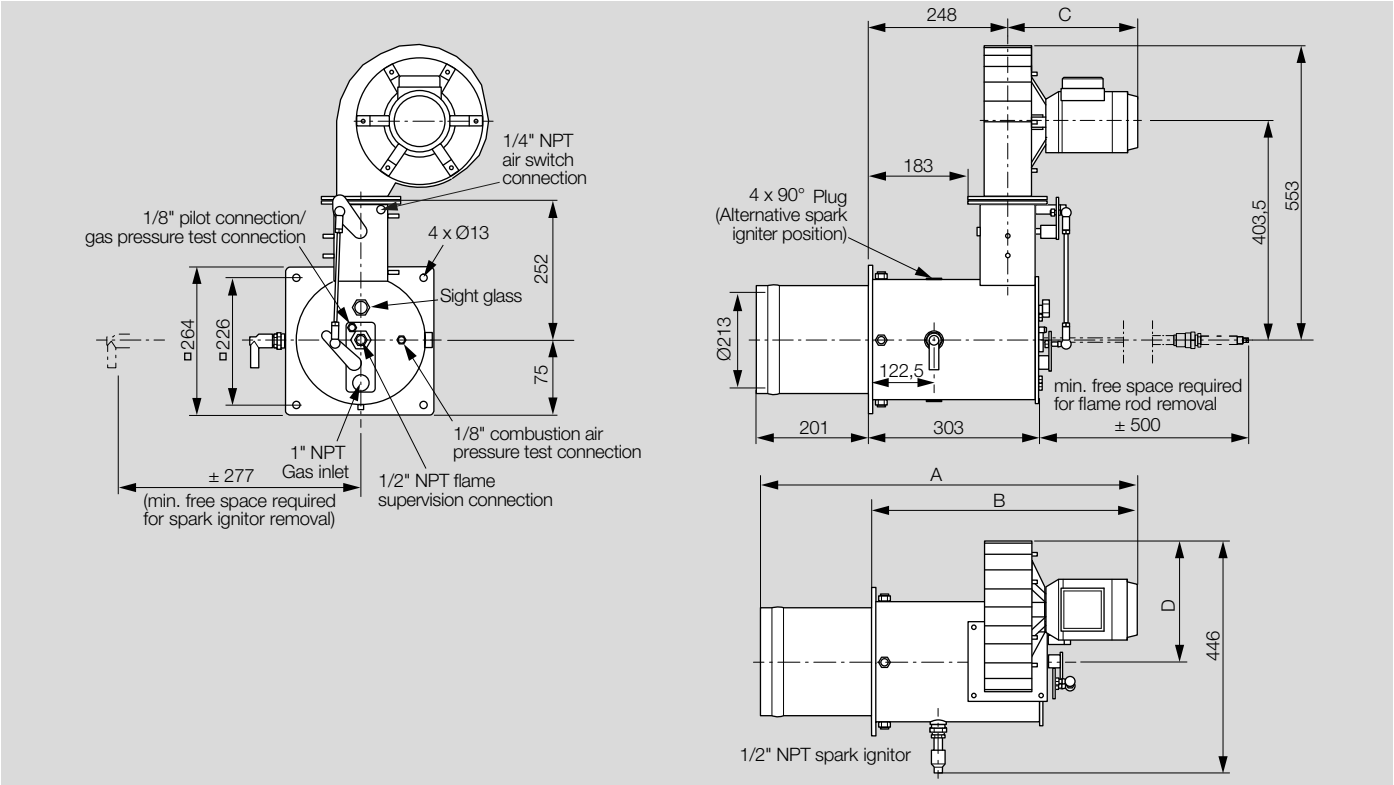
6.5.4 VP-II-150UMI300 [mm]



6.5.5 VP-II-300UHC142 [mm]

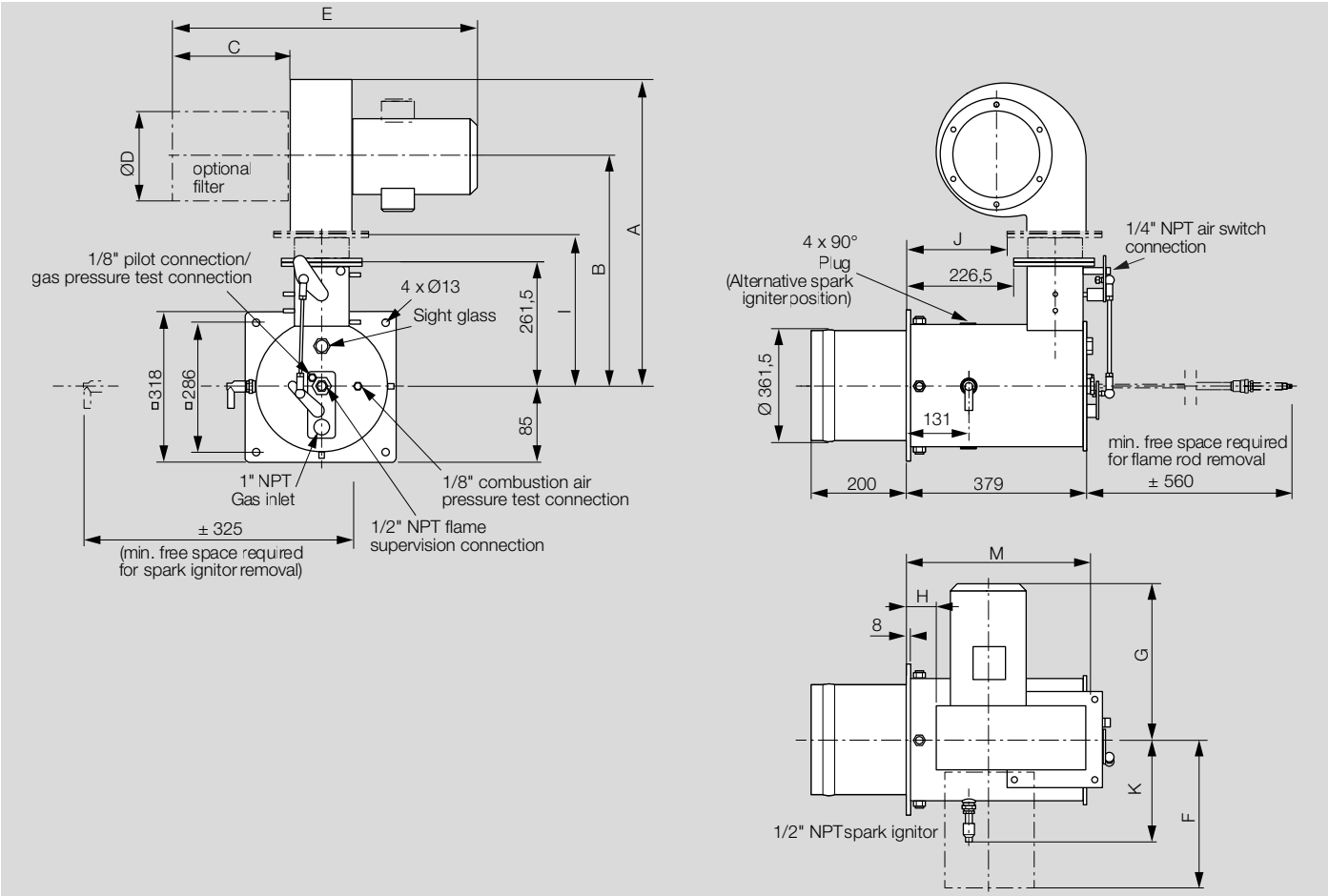


6.5.6 VP-II-300UMI300, VP-II-300UMI390 [mm]



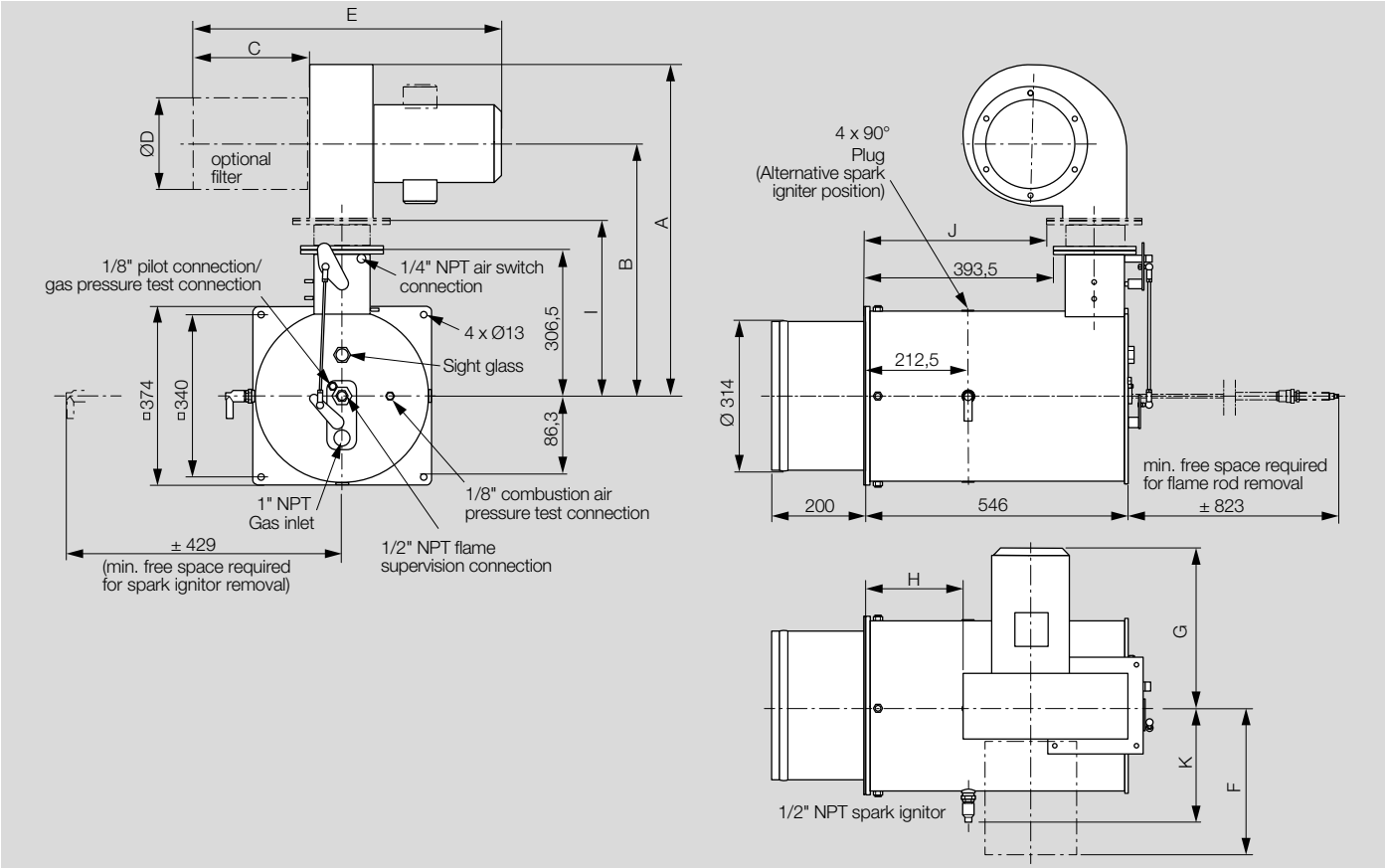
Blower	A	B	C	D
UMI300	706	505	257,1	248
UMI390	732,5	531,5	283,5	249

6.5.7
VP-II-600UHC182, VP-II-600UHC202 [mm]



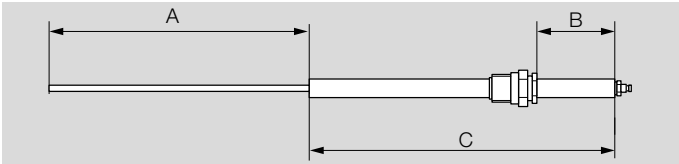
Blower	A	B	C	ØD	E	F	G	H	I	J	K
UHC182	548,5	402,5	220	Ø170	575	282	293	63,5	-	-	219
UHC202	648,5	483,5	240	Ø189	641	312,5	328,5	35,5	321,5	211,5	219

6.5.8 VP-II-900UHC182, VP-II-900UHC202 [mm]



Blower	A	B	C	ØD	E	F	G	H	I	J	K
UHC182	593,5	447,5	218	Ø170	575	282	293	230,5	-	-	242
UHC202	693,5	528,5	240	Ø189	641	312,5	328,5	202,5	366,5	378,5	242

6.6 Flame rod arrangement

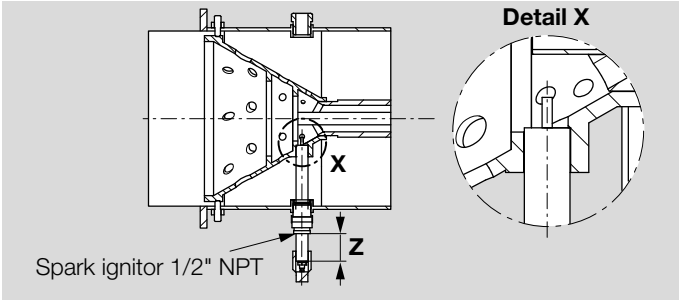


Burner	A	B	C
VP-II-60	152	70	235
VP-II-150	200	60	235
VP-II-300	200	25	235
VP-II-600	324	15	235
VP-II-900	432	20	356

- » The flame rod is located at the back of the burner, through the scanner tube.
- » It is important that the flame rod is mounted gastight!
- » The recommended adjusting dimension shall be respected.

Burner	Z
VP-II-150	15
VP-II-300	33
VP-II-600	27
VP-II-900	14

6.7 Spark ignitor arrangement



Burner	Z
VP-II-60	44

7 Spare parts

The PartDetective web app for selecting spare parts is available at www.adlatus.org.

8 Converting units

See www.adlatus.org







For more information

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