

# VALUPAK®

## Packaged gas burners



- High turndown.
- Available in 6 sizes.
- Capacities: 0.007 MBtu/hr - 4 MBtu/hr.
- Stable and clean combustion.
- Suitable for UV scanner and flame rod.
- Natural gas and LPG.
- Low gas pressure requirements.
- Ease of installation and operation with low maintenance requirements.
- All metal construction.
- Multi voltage and frequency blower motors.

## Product description

The VALUPAK® is designed for process air heating applications.

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.

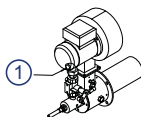
Available VALUPAK® sizes

Capacity and selection data in Btu, 50 Hz operation Gross heating value = 1000's Btu/ft <sup>3</sup> (st) HHV, d = 0.6 All figures are for balanced - 0 "wc - duct pressure [1]									
VALUPAK® size		60 [2]			150 [2]	300 [2]	600	800	1000
Standard blower type		UHC102	UHC122	UMI300					
Maximum heat release [3]	MBtu/h (HHV)	0.14	0.20	0.27	0.63	1.11	2.20	3	3.84
Minimum heat release	MBtu/h (HHV)	0.007	0.007	0.01	0.014	0.03	0.06	0.06	0.06
Turndown		20:1	30:1	27:1	46:1	36:1	36:1	49:1	62:1
Gas Q max.	ft <sup>3</sup> (st)/m	2.18	3.24	4.30	10	17.66	34.73	47.67	60.62
Gas Q min.	ft <sup>3</sup> (st)/m	0.11	0.11	0.16	0.22	0.47	0.97	0.97	0.97
Max. combustion air volume	ft <sup>3</sup> (st)/m	28.25	37.67	57.68	106	183	459	688	688
Gas pressure at test connection at maximum heat release	"wc	2.17	3.61	7.23	1	0.40	0.88	0.68	1.32
Blower motor 3x220-420x50 Hz	Hp	0.12			0.12	0.25	1.5	0.75	1.5
Weight	lbs	n/a			27.56	35.27	88.18	103.62	110.23
Flame length [4]	inch	up to 15.75 (after sleeve)			19.68	39.37	43.31	62.99	70.87

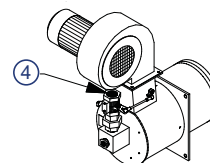
- [1] Air pressure switches should be selected to have a setpoint ranging from (0.80-4.01) "wc, with exception of the VALUPAK® 60 burner with a capacity of 0.14 MBtu or 0.20 MBtu : setpoint ranging from (0.16-1.20) "wc.
- [2] Single phase blower motor available.
- [3] Use of the standard round air inlet filter will cause a ± 15 % capacity reduction.  
Use of the standard VALUPAK® burner at 60 Hz will result in a higher max. capacity to which the gas pressures need to be adapted.
- [4] When firing in open air. Firing in a cross flow shortens flame.

Protection: IP54

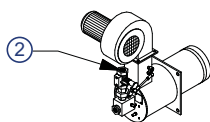
- 1) Rp 1/2 gas inlet
- 2) Rp 3/4 gas inlet
- 3) Rp 1 gas inlet
- 4) Rp 1 1/4 gas inlet
- 5) Rp 1 1/2 gas inlet (Rp 1 1/4 for LPG)
- 6) Rp 1 1/2 gas inlet



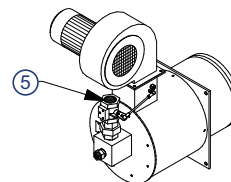
VALUPAK® 60



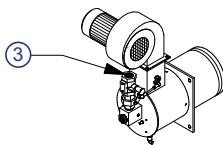
VALUPAK® 600



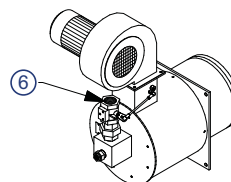
VALUPAK® 150



VALUPAK® 800



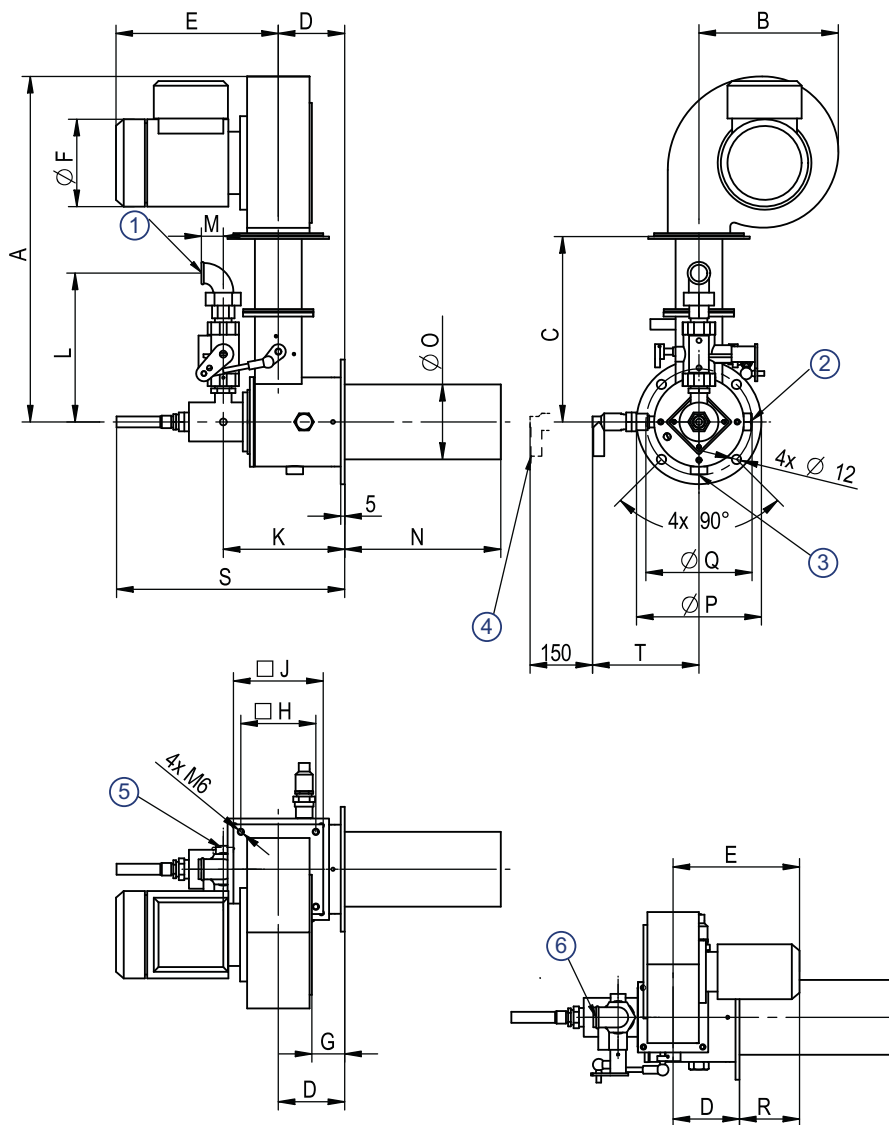
VALUPAK® 300



VALUPAK® 1000

## Dimensions and weights

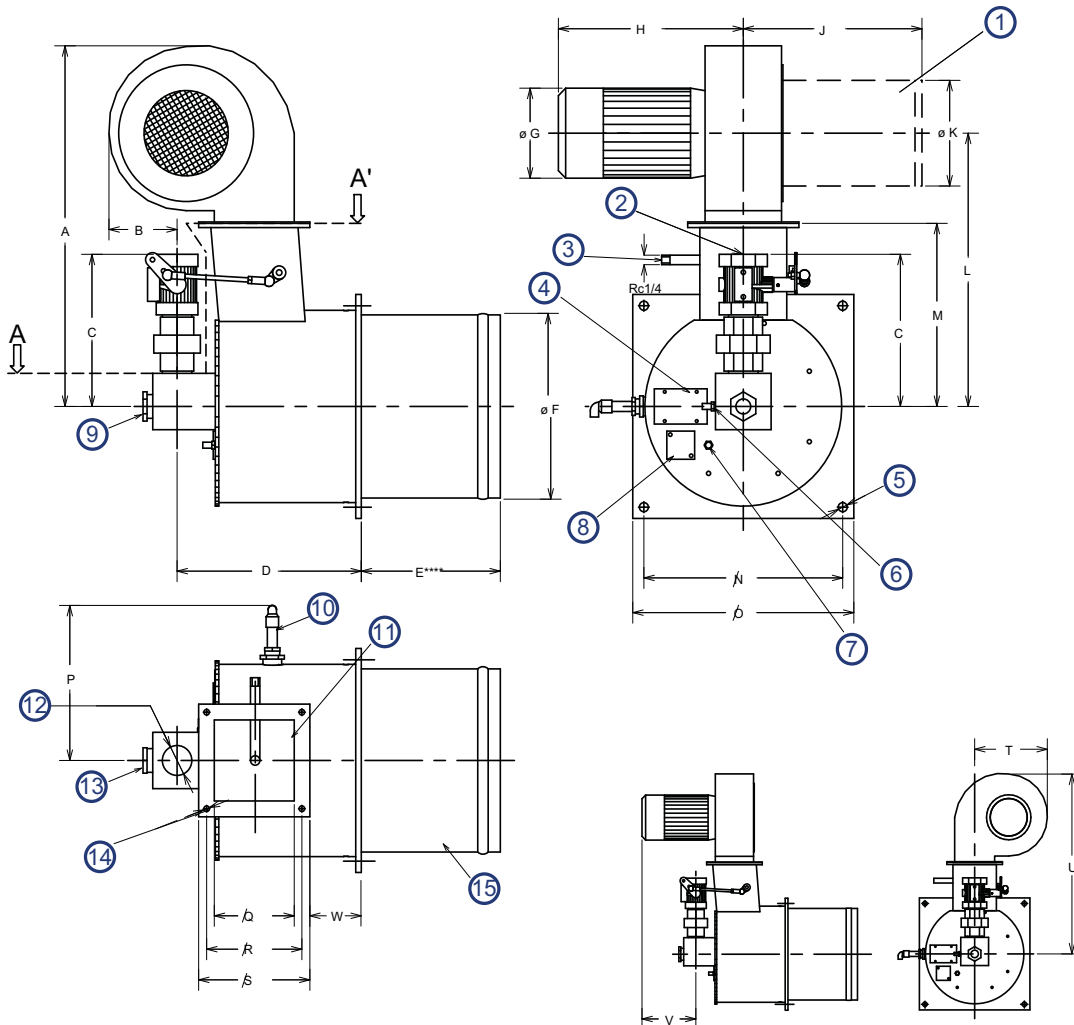
- 1) Gas inlet Rp1/2" with UHC122 & UM300 blower
- 2) Sight glass (alternative SI position)
- 3) Alternative SI position
- 4) Min. 4.13 inch free space required for spark ignitor removal
- 5) Gas inlet Rp 1/2" with UHC102 blower
- 6) Alternative gas inlet position with UHC102 blower



VAL 60	Dimensions in inches unless stated otherwise																		
Blower	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	S	T	
UHC102	11.89	5.31	5.51		6.38	2.80	1.57	2.99	3.58										
UHC122	17.44	7.05	9.37	3.35	8.19	4.41	1.65	3.78	5.12	6.12	7.52	1.10	7.87	3.78	6.30	5.35	11.69	5.35	
UMI300	21.22	9.76			10.12	4.72	1.59	4.41											

## Dimensions and weights

- 1) Round air filter (optional)
  - 2) Gas inlet (Y)
  - 3) Air press. switch connection
  - 4) Name plate
  - 5) Burner mounting holes 4x  $\phi 13$
  - 6) Gas pressure test connection
  - 7) Air pressure test connection
  - 8) Observation port
  - 9) Rp1/2 flame detector connection
  - 10) Spark ignitor [1]
  - 11) Combustion air inlet
  - 12) Gas inlet (Z)
  - 13) Rp1/2 flame detector connection
  - 14) For size 150 & 300 = 4 x M6  
for size 600 & larger = 4 x M8
  - 15) Discharge sleeve
- [1] spark ignitor 90° rotated (counter-clockwise) when looking into flame direction) on VALUPAK® 300 burner



VALUPAK®		Dimensions in inches unless stated otherwise																						
Burner size	A	B	C	D	E [2]	F $\phi$	G $\phi$	H	J	K $\phi$	L	M	N	O	P	Q	R	S	T	U	V	W	Y Rp	Z Rp
150	17.13	3.27	7.24	9.37	7.87	6.30	4.33	8.19	8.46	4.72	9.13	9.05	7.24	8.43	6.97	2.91	3.79	4.53	7	17.13	4.57	3.50	3/4	3/4
300	17.91	3.31	7.80	9.33	7.87	8.39	4.72	8.90	9.06	5.12	13.54	9.25	8.90	10.39	7.48	3.70	4.41	5.12	7.32	17.91	4.96	2.76	1	1
600	21.54	5.39	8.50	10.75	7.87	10.35	5.67	11.54	11.10	6.69	15.79	10.24	11.26	12.52	8.86	4.53	5.79	6.69	9.76	21.54	7.17	3.03	1-1/4	1-1/4
800 [1]	22.13	4.41	9.33 [1]	14.65	7.87	12.36	5.67	11.54	11.10	6.69	17.56	12	13.39	14.72	8.19	4.53	5.79	6.69	9.76	23.31	6.18	5.91	1-1/2	1-1/2 [1]
1000	23.31	4.41	9.33	14.65	7.87	12.36	5.67	11.54	11.10	6.69	17.56	12	13.39	14.72	8.19	4.53	5.79	6.69	9.76	23.31	6.18	5.91	1-1/2	1-1/2

[1] For LPG C=241 and Z=Rp 1.1/4

[2] 11.81 inch optional available

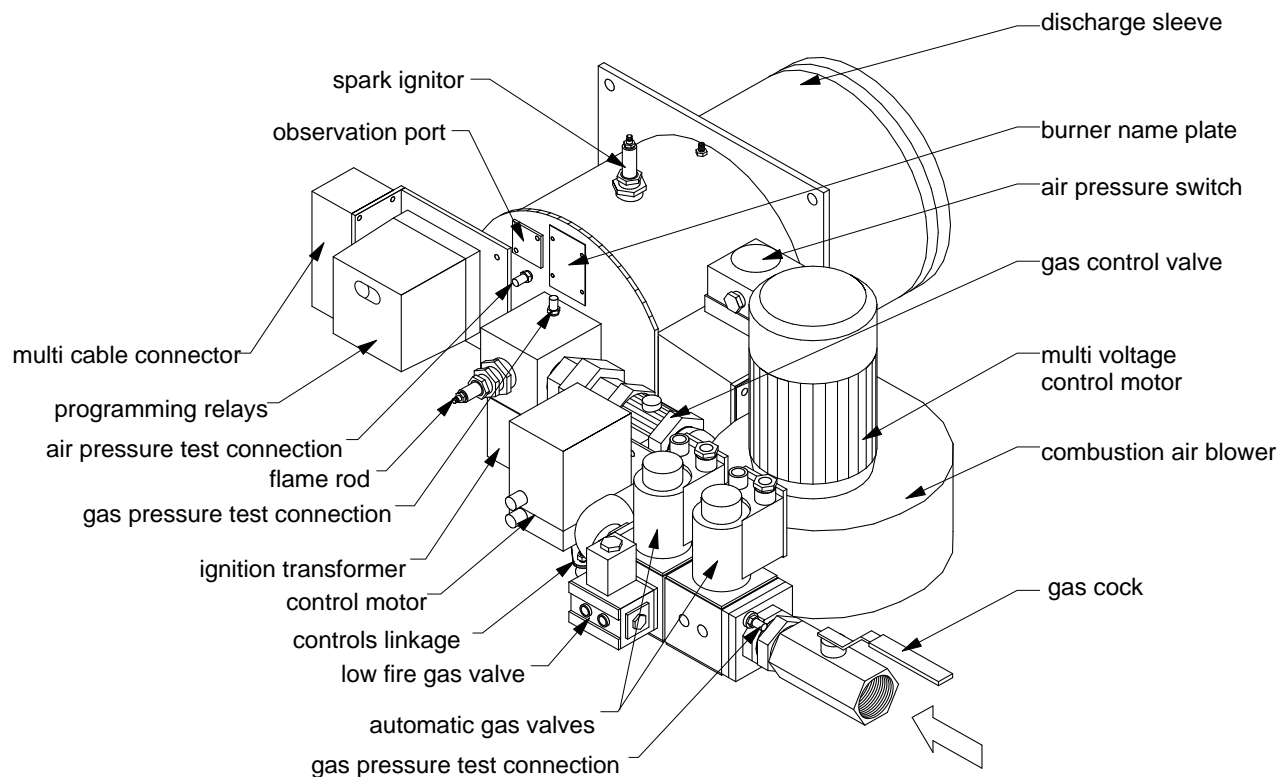
## Applications

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.

## Options

- round air filter
- single phase motor for sizes 60, 150 and 300
- long discharge sleeve 11.81 inch
- control motor
- flame rod or UV scanner

Application example MAXON VALUPAK® 600 burner (gas)



Read VALUPAK® instructions for complete information on VALUPAK® burners