



### SNMD – Features

- Wide turndown
- Low maintenance
- Burns all clean gases and light oil
- Low velocity
- Pilot ignition as standard
- Facility for mounting UV scanner or ionisation rod
- Robust construction
- Can be supplied with square or round ignition tiles

The range of SNMD dual fuel burners has been developed from the widely used and successful range of SNM nozzle mix gas burners.

This nozzle mix burner is capable of operating on any clean commercial gas or light fuel oil to take advantage of the interruptible gas tariffs and to give flexibility of operation. The burner is limited for use on light fuel oils having a maximum viscosity of 4 cSt, it will not operate on heavy, residual fuel oils.

This burner employs a modified backplate/burner nozzle arrangement to accept the primary air-gas inlet body and oil atomiser.

The burner is supplied with a high quality refractory burner tile, suitable for operating temperatures up to 1600°C and an SDV series graduated disc valve for manual adjustment of the maximum oil flow.

This burner does not need compressed air for normal

operation but uses low pressure combustion air to atomise the oil.

This primary atomising air must be supplied at a minimum pressure of 70 mbar to ensure efficient atomisation and is typically supplied from the main combustion air fan.

On applications where the burner duty requires a combustion air pressure below 70 mbar, and, particularly in multi-burner systems, the primary atomising air may be provided by a separate blower.

Combustion air and fuel are thoroughly mixed in the burner head before combustion takes place in the burner tile. This gives an extremely stable flame with good turndown characteristics. It is possible to operate the burner with up to 500% excess air when gas firing or up to 200% excess air when oil firing, giving clean combustion and good flame retention.

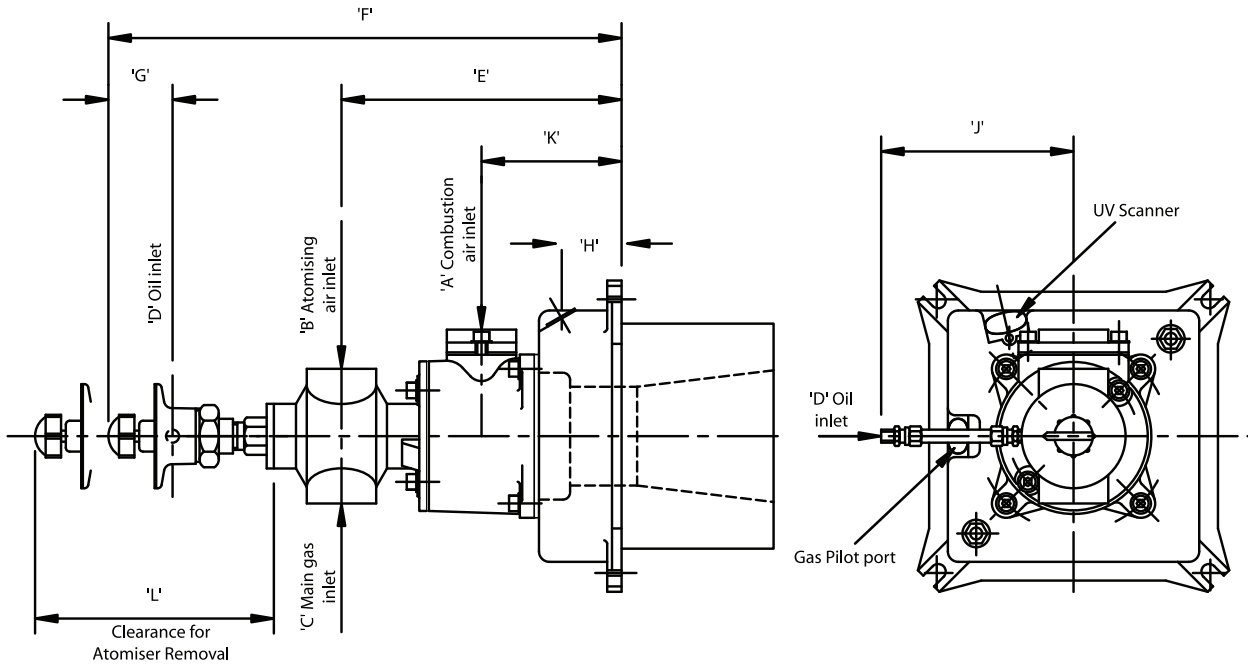
### Capacities and Specifications

Air pressure (mbar)	Primary: 70 – Secondary: 35				Primary: 70 – Secondary:70				Primary: 87.5 – Secondary: 87.5			
	Air volume (Nm <sup>3</sup> /h)		Burner duty		Air volume (Nm <sup>3</sup> /h)		Burner duty		Air volume (Nm <sup>3</sup> /h)		Burner duty	
	Prim	Sec	kW	l/h	Prim	Sec	kW	l/h	Prim	Sec	kW	l/h
SNMD.81	12	80	80	7.5	12	14	109	10.2	14	127	122	11.4
SNMD.82	24	168	165	15.5	24	238	226	21.2	27	267	256	24
SNMD.83	48	316	314	29.4	48	447	427	40	54	500	480	45
SNMD.84	97	654	646	60.6	97	925	885	83	109	1034	982	92
SNMD.85	129	991	971	91	129	1404	1323	124	144	1568	1472	138

Notes: Minimum gas pressure at burner head 5 mbar.  
Minimum oil pressure at burner head 0.3 to 0.7 mbar.  
Oil capacities are based on 9,100 Kcals and 20% excess air.

## Dimensions

### SNM Series Nozzle Mixing Gas/Oil Burner



Model No.	Part No.												Weight (kg)
				C	D	E	F	G	H	J	K	L	
SNMD 81	3.04.039	Rp1	Rp1	Rp1	R <sup>3</sup> / <sub>8</sub>	219	463	54	111	508	111	392	22
SNMD 82	3.04.040	Rp1 <sup>1</sup> / <sub>2</sub>	Rp1	Rp1	R <sup>3</sup> / <sub>8</sub>	238	473	54	111	508	117	394	28
SNMD 83	3.04.041	Rc 2	Rc 2	Rc 2	R <sup>3</sup> / <sub>8</sub>	257	511	54	146	508	124	408	45
SNMD 84	3.04.042	Rc 3	Rc 2	Rc 2	R <sup>3</sup> / <sub>8</sub>	294	546	54	146	508	140	433	45
SNMD 85	3.04.043	Rc 4	Rc 2 <sup>1</sup> / <sub>2</sub>	Rc 2 <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>8</sub>	432	733	54	179	508	226	613	155

Note: For additional dimensions of the complete burner see SNM gas burner data sheet.

**WARNING:** The data outlined is for information only and does not form part of any contract. Our policy is one of continuous improvement and we therefore reserve the right to modify specifications or dimensions without prior warning. Situations dangerous to personnel and property can develop from incorrect installation and operation of combustion equipment. Fives North American Combustion UK, Ltd urges compliance with International, National and Local Safety Standards and that installation is carried out by properly qualified personnel.

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