

Lanemark FD-E series packaged burners are designed to offer low cost, high turn-down (gas only) control for process air heating applications in convection ovens and dryers.

FD-E series burners are particularly suited to direct-fired applications and can be mounted directly on to the wall of a dryer, oven or process air heating duct to operate either in line with or at 90° to the process air flow.

FD-E series burners produce short flame profiles – so important for industrial oven design. Combustion air and gas is progressively mixed within the internal burner cone assembly, guaranteeing stable combustion over a wide range of oven/dryer process air flows.



Model	Heat Input Range	
FD5-E (G96)	9 - 117 kW	(30,000 - 400,000 Btu/h)
FD5-E (VCD1)	9 - 220 kW	(30,000 - 750,000 Btu/h)
FD10-E (VCD1)	13 - 352 kW	(45,000 - 1,200,000 Btu/h)
FD10-E (VCD2)	13 - 440 kW	(45,000 - 1,500,000 Btu/h)
FD15-E (VCD2)	18 - 660 kW	(60,000 - 2,250,000 Btu/h)
FD20-E (VCD3)	22 - 880 kW	(75,000 - 3,000,000 Btu/h)

Burner turn-down is determined by the ratio of the high and low gas firing rates. The maximum turn-down ratio is 40:1.

Typical Applications

- **Product finishing**
 - Pre-treatment dryers
 - Final treatment ovens for paint drying
 - Conveyor and batch ovens
- **Textile and fabric dryers**
 - **Rotary moulding machines**
 - **Food processing**
 - **Powder and grain dryers**

FD burners conform with European Standard EN 746 Part 2 as appropriate and are pre-wired and tested prior to despatch.

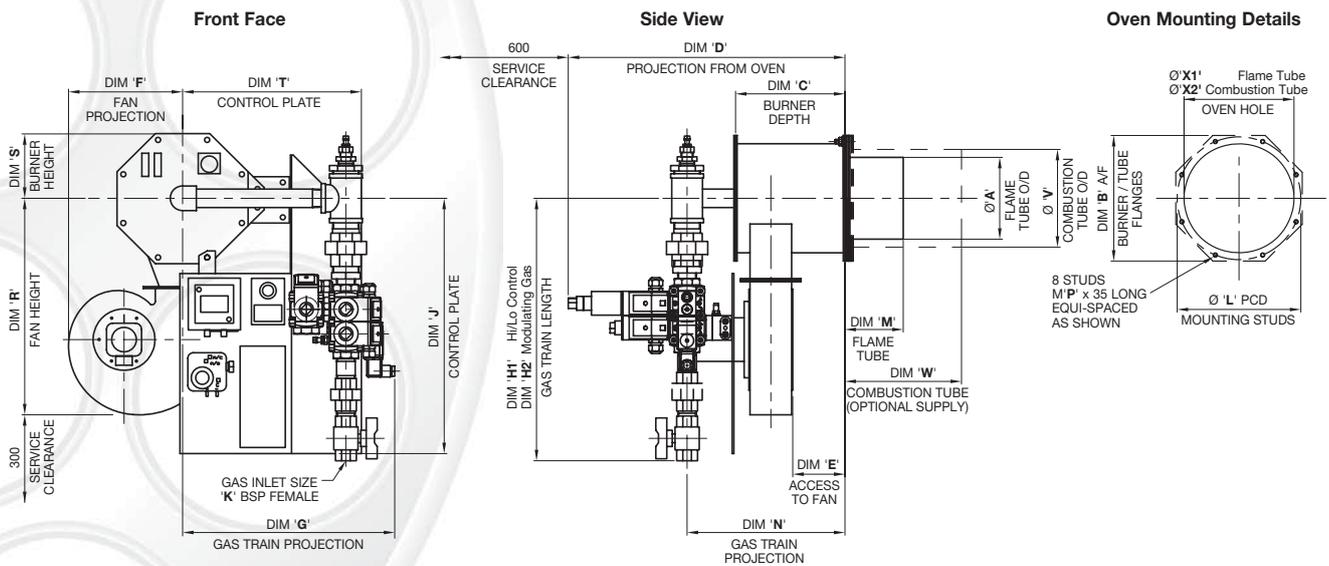
Specifications

FD-E burners comprise a burner windbox, combustion air fan, a manual sliding damper fitted between the combustion air fan and the air entry flange on the burner windbox, a compact monobloc valve gas train and gas burner controls mounted on a control plate.

Standard control items include a burner controller, ignition transformer and differential air pressure switch. Two 3-way air valves perform safety checks on the air pressure switch in both open and closed modes each time the burner fires, allowing the independent operation of the combustion air fan in conjunction with oven/dryer main recirculation fans.

	✓ Standard equipment	● Options
Fuels	✓ Natural gas	● Propane
Control voltages	✓ 230V	● 110V
Combustion air fan electrical supplies	✓ 400V/3ph/50Hz	● 230V/1ph/50Hz
Flame sensing	✓ Flame electrode	● UV scanner
Heat output control options	<ul style="list-style-type: none"> ✓ On/off or ✓ High/low 	<ul style="list-style-type: none"> ● Modulating (gas only) Either 3 wire valve positioning (24/110/230V) or 4 - 20mA or 0 - 10V DC

FD-E BURNERS



	A	B	C	D	E	F	G	H1	H2	J	K	L	M	N	P	R	S	T	V	W	X1	X2	Net Weight kg	Gross Weight kg	
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	"BSP"	mm	mm	mm	Stud	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
FD5-E 9-117 kW	Ø150	230	200	385	100	220	360	360	460	500	3/4"	225	100	295	M8	425	120	320	Ø179	200	Ø160	Ø200	28	38	
FD5-E 9-220 kW	Ø150	230	200	510	100	220	380	465	585	500	1"	225	100	295	M8	425	120	320	Ø179	200	Ø160	Ø200	30	40	
FD10-E 13-352 kW	Ø190	280	250	565	110	240	400	480	600	530	1"	268	100	340	M8	470	140	325	Ø218	250	Ø200	Ø240	34	44	
FD10-E 13-440 kW	Ø190	280	250	580	110	240	420	520	810	530	1 1/2"	268	100	340	M8	470	140	325	Ø218	250	Ø200	Ø240	36	46	
FD15-E 18-660 kW	Ø240	340	300	650	150	240	420	520	810	520	1 1/2"	330	100	430	M10	525	185	355	Ø274	300	Ø250	Ø295	42	52	
FD20-E 22-880 kW	Ø280	390	350	735	170	250	435	715	885	600	2"	380	100	470	M10	575	215	380	Ø319	350	Ø290	Ø330	96	106	

All dimensions in mm, except where stated.

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BurnerCare

All FD burners benefit from Lanemark's BurnerCare customer support. BurnerCare services include burner system commissioning/start-up, supply of spare parts and system training. BurnerCare will provide a contract service plan and a rapid response facility, designed to ensure the continued and reliable operation of Lanemark equipment worldwide.

Additional Burner Products (See individual Data Sheets for full details)

The FD-E burner range is just one of the series of forced draught burners available from Lanemark International Ltd.

Also available are the TX small diameter immersion tube tank heating burner systems. The TX range is designed for the heating of process liquids – each system comprising burner, associated controls, submerged tube heat exchanger and exhaust fan. Based on the gross calorific value of the fuel, efficiencies averaging 80%+ are readily achieved with every installation. The TRX burner system provides a packaged alternative to the TX series and is ideal for smaller scale operations.

All illustrations are for guidance only. For reasons of continuous development, Lanemark International Limited reserves the right to alter specifications without prior notice.

LANEMARK
INTERNATIONAL

Registered Address: Lanemark House, Whitacre Road, Nuneaton,
Warwickshire, UK, CV11 6BW
Tel: +44 (0) 24 7635 2000 Fax: +44 (0) 24 7634 1166
E-mail: info@lanemark.com Web site: http://www.lanemark.com
Company Registration No. 1561589 VAT No. GB 307 5790 48
Place of Registration: England & Wales
Directors: P.R. Collier, J.S. Foster, A.E. Thompson

