OIL, GAS & DUAL FUEL BURNERS

‘N’ Series & ‘P’ Series Burner Range

With over 75 years experience and expertise, Nu-way is the UK’s leading manufacturer of burner and burner solutions.

Since 1932 we have been dedicated to producing the best performing burners available and have developed an enviable reputation for quality and excellence.

Our advanced oil, gas and dual fuel burners are known for their exceptional reliability, efficiency and controllability. We also have our own extensive research and development laboratories which enable us to provide customers with the most effective technology.

The outputs of the oil burners are based on a calorific value of 11.86 kWh/kg.
The output range of the gas burners applies to natural gas, calorific value 10 kWh/m^3.

Please contact us if you have a special burner or fuel requirement which is not included in this brochure.
All outputs are based on a nett CV basis.

Issue 01/11

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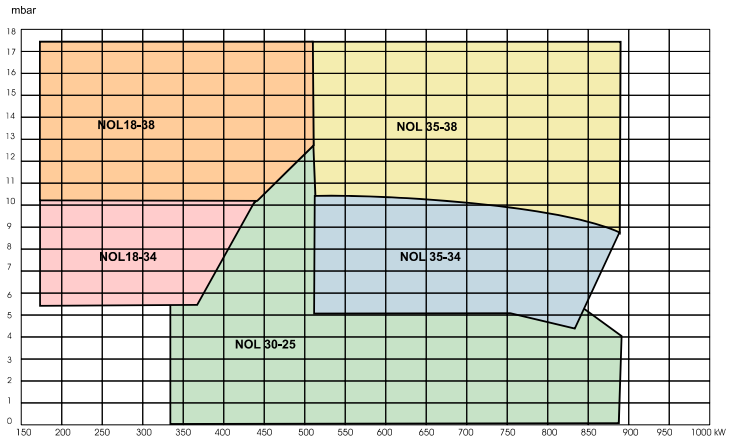
All dimensions are in mm.

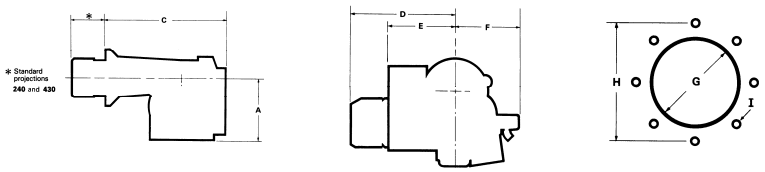
The enclosed details are for guidance only, please refer to Nu-way for more details,

LIGHT OIL BURNERS

NOL18/30/35

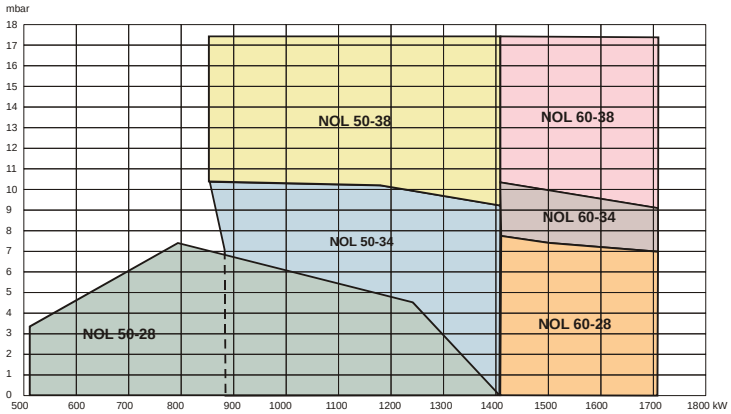


NOL18/30/35
Available in versions 160kW up to 891 kW, 2-stage, 3-stage or fully modulating.
Plug-in contact facilitates the installation.
Quiet in operation, reliable and trouble-free

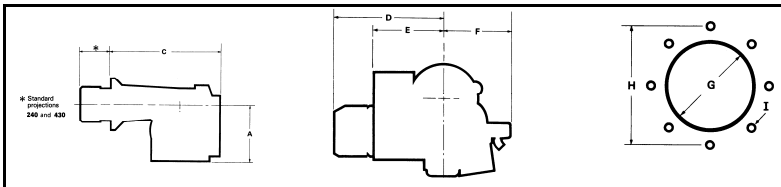


Burner	A	C	D	E	F	G	H	I
NOL18-34	387	686	420	340	337	230	305	10
NOL18-38	480	737	457	340	350	230	305	10
NOL30-25	314	542	307	340	300	230	254	10
NOL35-34	387	686	420	340	337	230	305	10
NOL35-38	480	737	457	340	350	230	305	10

NOL50/60



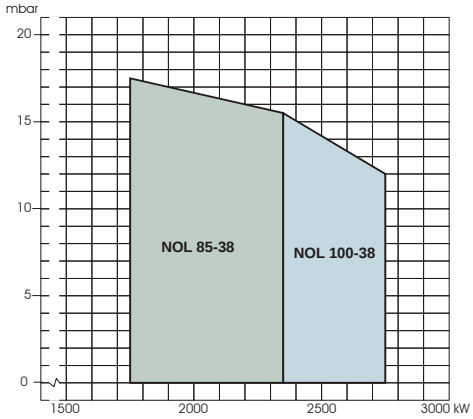
NOL50/60
Available in versions 507 kW up to 1708 kW.
2 stage, 3 stage or fully modulating.
Plug-in contact facilitates the installation.
Quiet in operation, reliable and trouble-free



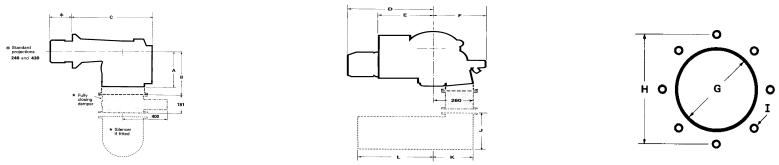
Burner	A	C	D	E	F	G	H	I
NOL50-28	387	686	420	340	337	254	305	10
NOL50-34	387	686	457	340	337	254	305	10
NOL50-38	480	737	480	340	350	254	305	10
NOL60-28	387	686	457	340	337	254	305	10
NOL60-34	387	686	480	340	337	254	305	10
NOL60-38	480	737	480	340	350	254	305	10

LIGHT OIL BURNERS

NOL85-38 / 100-38

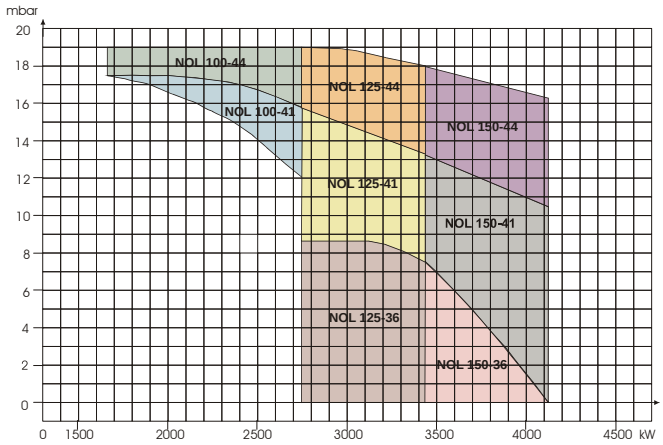


NOL85 / 100
Available in versions 1742 kW up to 2767 kW, 2-stage and modulating. Quiet in operation. Wide adjustment range, high efficiency, with constant combustion valves. Energy saving.

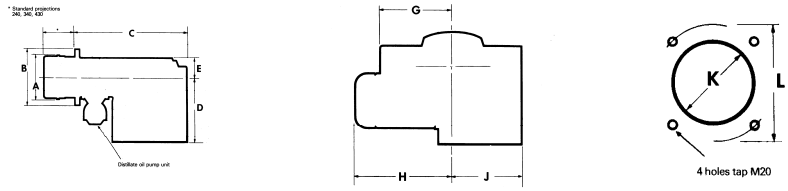


Burner	A	B	C	D	E	F	G	H	I	J	K	L
NOL85-38	-	480	737	537	490	350	280	305	20	381	260	476
NOL100-38	-	480	737	537	490	365	280	305	10	381	260	476

NOL100 / 125 / 150



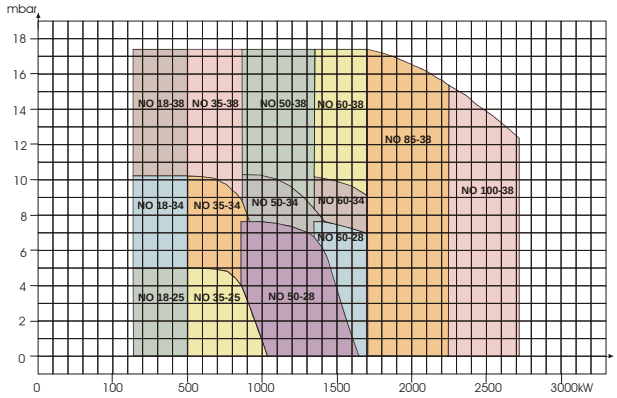
NOL100,125 and 150
Available in versions 1688 kW up to 4128 kW, 2-stage and modulating. Quiet in operation. Wide adjustment range, high efficiency, with constant



Burner	A	B	C	D	E	G	H	J	K	L PCD
NOL100-41	325	420	910	500	145	535	545	435	330	454
NOL100-44	325	420	910	500	145	353	545	435	330	454
NOL125-36	325	420	910	500	145	535	545	435	330	454
NOL125-41	325	420	910	500	145	535	640	435	330	454
NOL125-44	325	420	910	500	145	535	640	435	330	454
NOL150-36	325	420	910	500	145	535	640	435	330	454
NOL150-41	325	420	910	500	145	535	640	435	330	454
NOL150-44	325	420	910	500	145	535	640	435	330	454

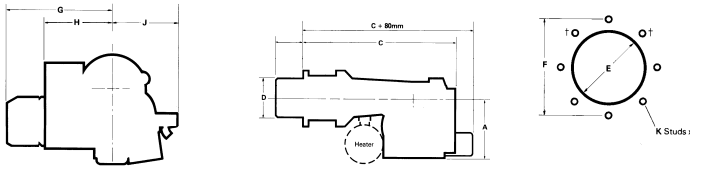
HEAVY OIL BURNERS

NOE/F/G18-25 to NOE/F/G100-38



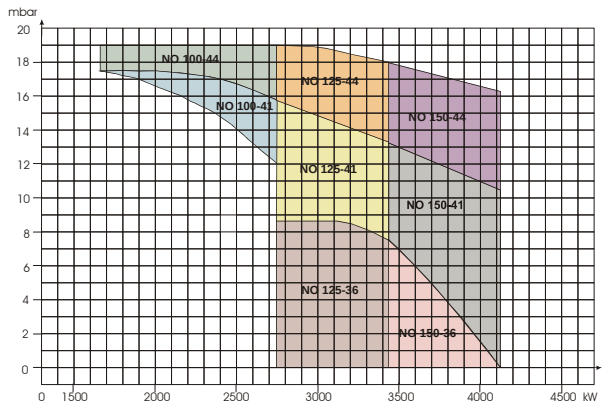
NOE/F/G18-25 to NOE/F/G100-38
Available in versions up to 2721 kW and designed for 2-stage and modulating operation. Wide adjustment range, high efficiency, quiet in operation, with constant combustion valves.

The NOE/F/G range of burners are available to fire a wide range of fuels from 8 cSt through to 840 cSt. Other heavier oil can also be accommodated on request.



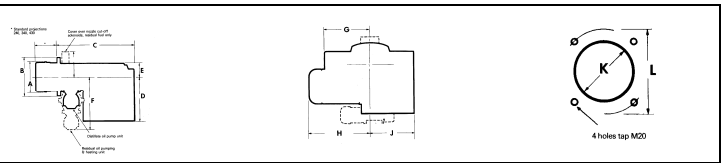
Burner	A	C	D	E	F	G	H	J	K	L
NOE/F/G 18-25	314	785	178	205	254	352	340	315	8	M10
NOE/F/G 18-34	387	978	182	230	305	420	340	337	8	M10
NOE/F/G 18-38	480	1029	182	230	305	457	340	350	8	M10
NOE/F/G 35-25	314	785	178	205	254	352	340	315	8	M10
NOE/F/G 35-34	387	978	182	230	305	420	340	337	8	M10
NOE/F/G 35-38	480	1029	182	230	305	457	340	350	8	M10
NOE/F/G 50-28	387	978	223	254	305	420	340	337	8	M10
NOE/F/G 50-34	387	978	223	254	305	457	340	337	8	M10
NOE/F/G 50-38	480	1029	223	254	305	480	340	350	8	M10
NOE/F/G 60-28	387	978	223	254	305	457	340	337	8	M10
NOE/F/G 60-34	387	978	223	254	305	480	340	337	8	M10
NOE/F/G 60-38	480	1029	223	254	305	480	340	350	8	M10
NOE/F/G 85-38	480	1029	254	280	305	537	490	365	8	M10
NOE/F/G 100-38	480	1029	254	280	305	537	490	365	8	M10

NOE/F/G100, 125 & 150



NOG100, 125 and 150
Available in versions up to 4128 kW and designed for 2-stage and modulating operation. Wide adjustment range, high efficiency, quiet in operation, with constant combustion valves.

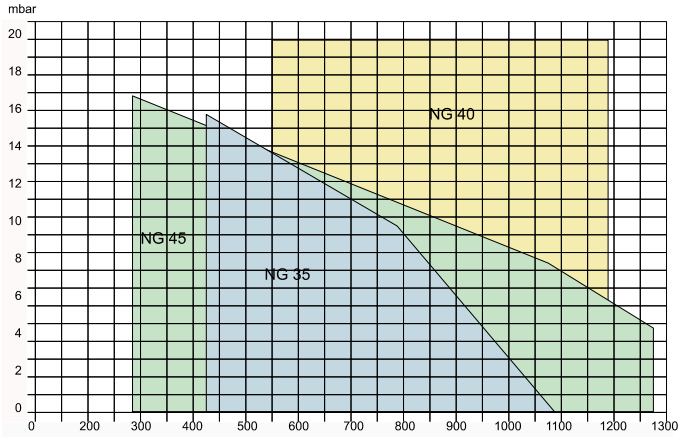
The NOG range of burners are available to fire a wide range of fuels from 8 cSt through to 840 cSt. Other heavier oil can also be accommodated on request.



Burner	A	B	C	D	E	F	G	H	J	K	L
NOG100-44	325	420	910	500	145	600	535	545	435	330	454
NOG125-36	325	420	910	500	145	600	535	545	435	330	454
NOG125-41	325	420	910	500	145	600	535	640	435	330	454
NOG125-44	325	420	910	500	145	600	535	640	435	330	454
NOG150-36	325	420	910	500	145	600	535	640	435	330	454
NOG150-41	325	420	910	500	145	600	535	640	435	300	454
NOG150-44	325	420	910	500	145	600	535	640	435	300	454

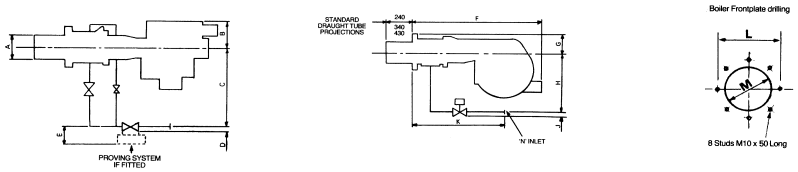
GAS BURNERS

NG35 / 40 / 45



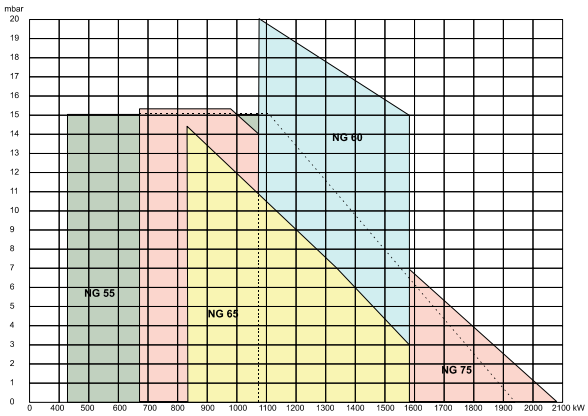
NG35 / 40 / 45
Available in versions up to 1137 kW, 2-stage or modulating.

Energy saving and compatible with environmental requirements. Quiet in operation and designed for easy maintenance.

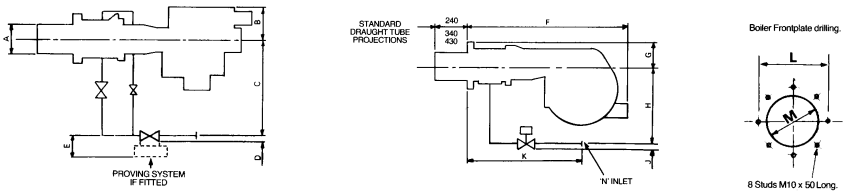


Burner	A	B	C	D	E	F	G	H	J	K	L	M	N BSP
NG35	182	220	430	70	270	885	141	300	110	745	254	200	2”
NG40	224	260	430	70	270	1183	166	300	110	745	305	234	2”
NG45	224	260	430	70	270	1183	166	300	110	745	305	234	2”

NG55 / 60 / 65 / 75



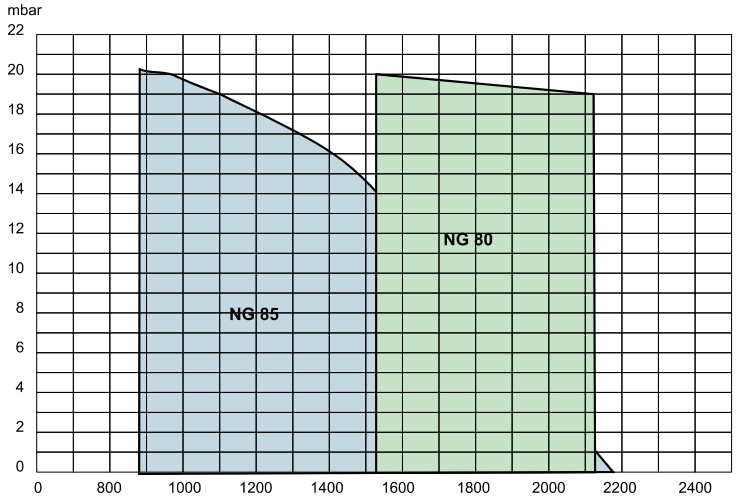
NG55 / 75
Available in versions up to 2092 kW, 2-stage and modulating. The NG series sets new standards in efficient and reliable operation. Developed to EN676 Standards. Delivered ready to install with pre-wired packaged controls system and simple plug-in gas train arrangements.



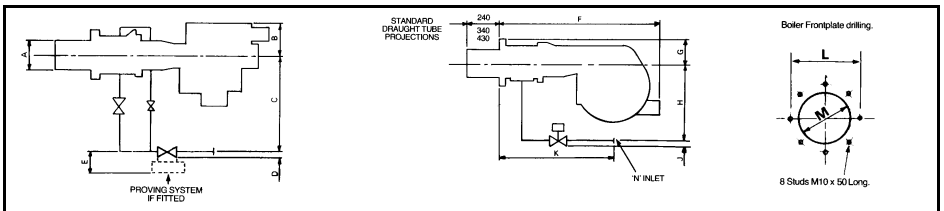
Burner	A	B	C	D	E	F	G	H	J	K	L PCD	M	N BSP
NG55	224	260	430	70	270	1183	166	300	110	745	305	234	2”
NG60	254	260	430	70	270	1115	166	300	110	745	305	265	2”
NG65	224	260	430	70	270	1183	166	300	110	745	305	234	2”
NG75	254	260	865	100	295	1183	166	354	100	685	305	265	2½”

GAS BURNERS

NG80 / 85

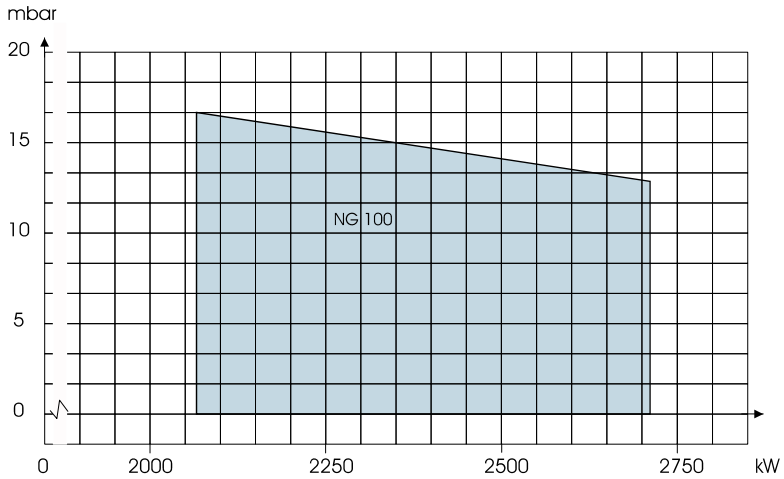


NG80 / 85
Available in versions up to 2174 kW, 2-stage and modulating. The NG series sets new standards in efficient and reliable operation. Developed to EN676 Standards. Delivered ready to install with pre-wired packaged controls system and simple plug-in gas train arrangements.

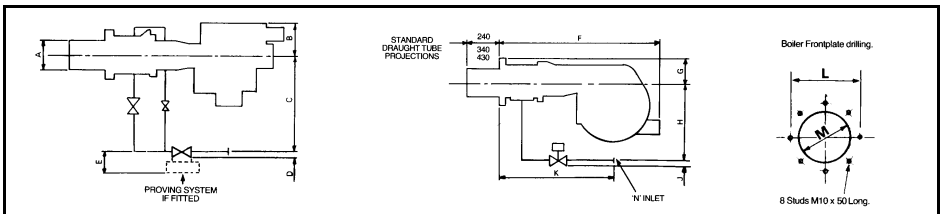


Burner	A	B	C	D	E	F	G	H	J	K	L PCD	M	N BSP
NG80	254	260	865	100	295	1115	166	354	100	685	305	265	2½"
NG85	254	260	865	100	295	1183	166	254	100	685	305	265	2½"

NG100



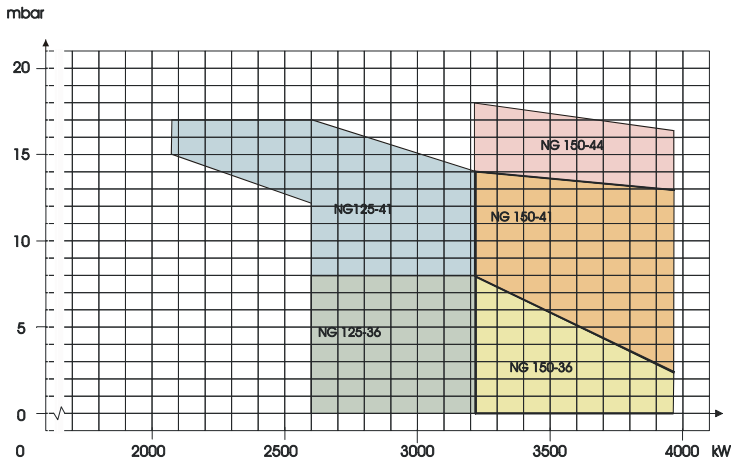
NG100
Available in versions up to 2750 kW, 2-stage and modulating. The NG series sets new standards in efficient and reliable operation. Developed to EN676 Standards. Delivered ready to install with pre-wired packaged controls system and simple plug-in gas train arrangements.



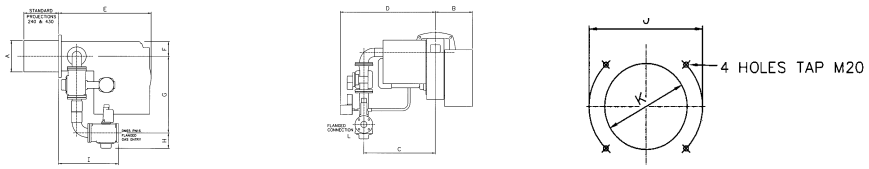
Burner	A	B	C	D	E	F	G	H	J	K	L PCD	M	N BSP
NG100	254	285	865	100	295	1115	166	354	100	685	305	265	2½"

GAS BURNERS

NG125 / 150



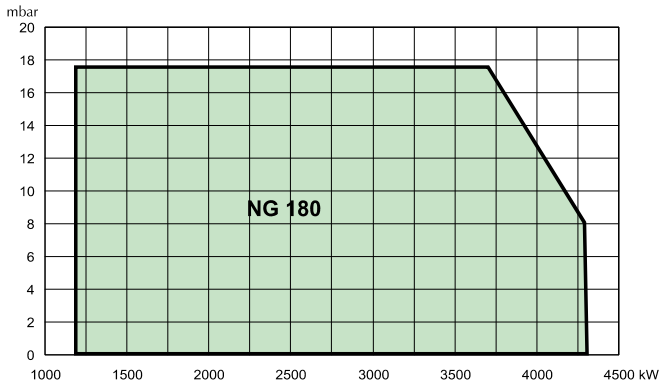
NG125/150
Available in versions up to 3970 kW, 2-stage and modulating. The NG series sets new standards in efficient and reliable operation. Developed to EN676 Standards. Delivered ready to install with pre-wired packaged controls system and simple plug-in gas train arrangements.



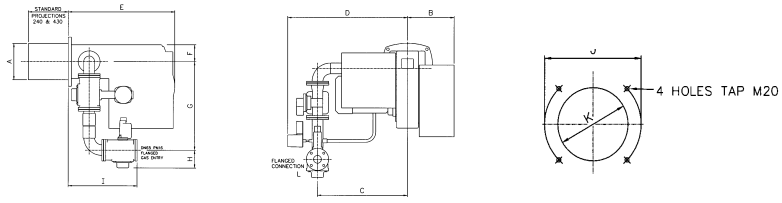
Burner	A	B	C	D	E	F	G	H	I	J	K	L PCD
NG125-36 NG125-41	310	400	740	1000	906	145	760	163	590	454	330	2½”
NG150-36 NG150-41 NG150-44	310	400	740	1000	906	145	760	163	610	454	330	3”

GAS BURNERS

NG180



NG180
Available in versions 1090-4303 kW, 2-stage and modulating. The NG series sets new standards in efficient and reliable operation. Developed to EN676 Standards. Delivered ready to install with pre-wired packaged controls system and simple plug-in gas train arrangements.



Burner	A	B	C	D	E	G	I	J	K	L
NG180	310	385	710	960	905	763	570	454	330	DN65 PN16

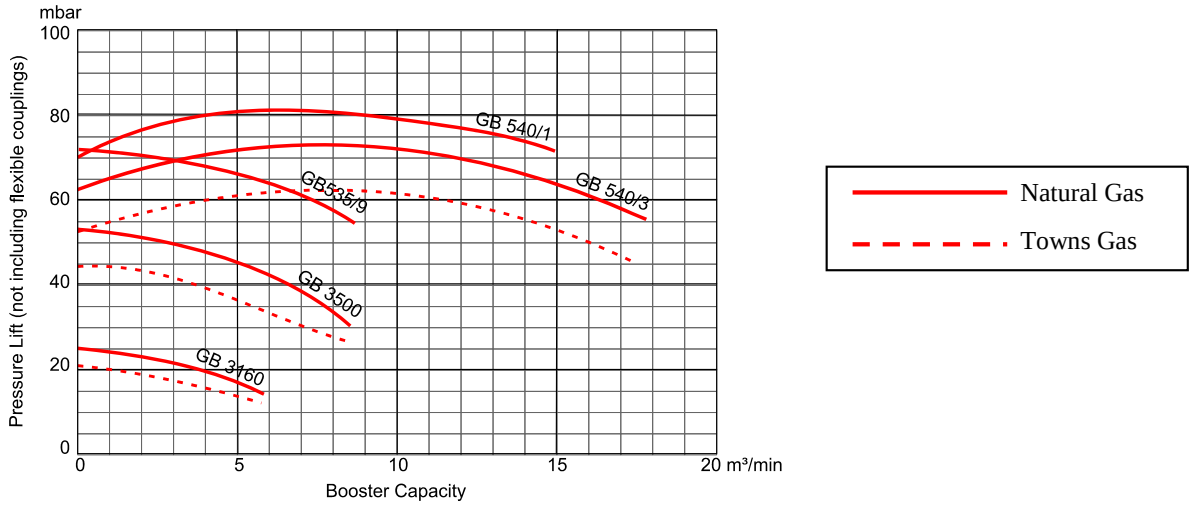
GAS BOOSTERS

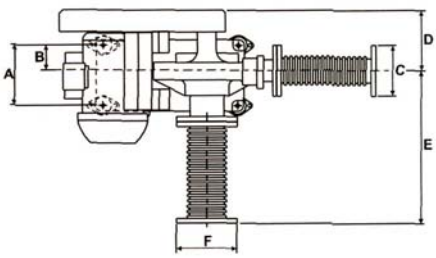
GB3160 / GB3500 / GB535 / GB540

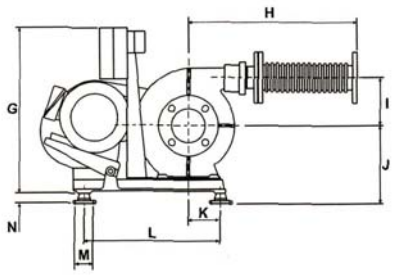
Provides pressure lift where nominal supply pressure is lower than required.

Gas Boosters are available for:

- Single booster/burner operation
- Single booster/multi burner operation (max 4 burners)
- Automatic twin duty standby operation (max 4 burners)
- Suitable for natural and manufactured gas
- Complete with anti-vibration kit





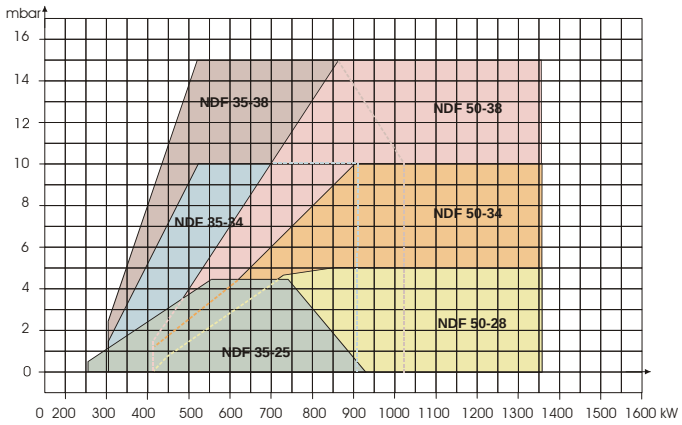


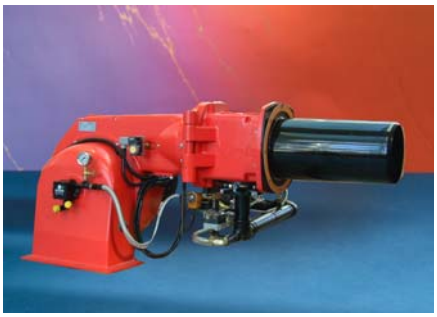
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
GB3160	90	45	2” Table E	175	352	3” Table E	665	455	130	265	115	430	73	37
GB3500	90	45	2” Table E	175	352	3” Table E	665	455	130	265	115	430	73	37
GB535	143	80	DN50	168	401	DN80	700	480	127	215	80	378	73	37
GB540	184	80	DN 80	206	515	DN100	700	537	127	239	80	419	73	37

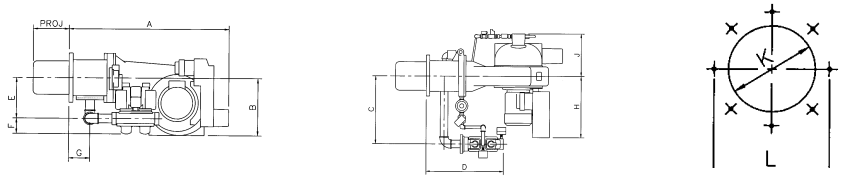
DUAL FUEL BURNERS

NDF35/NDF50

NDF35/NDF50
Available in versions 253 kW up to 1026 kW
Developed from field experiences in the European and overseas markets, the NDF series sets new standards in efficient and reliable operation. Developed to current and future test authority requirements in Europe. Delivered ready to install with pre-wired packaged control system and simple plug-in gas train arrangements.



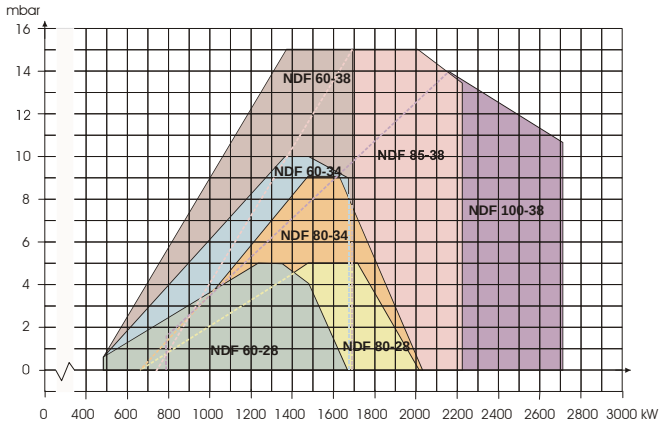


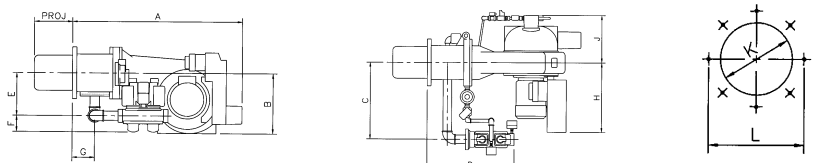


Burner	A	B	C	D	E	F	G	H	J	K	L
NDF35-25	885	340	540	610	305	105	141	500	310	200	305
NDF35-34	1069	385	540	610	305	105	141	500	335	200	305
NDF35-38	1081	475	540	610	305	105	141	500	350	200	305
NDF50-28	1069	385	540	610	305	105	141	500	335	250	305
NDF50-34	1069	385	540	610	305	105	141	500	335	250	305
NDF50-38	1081	475	540	610	305	105	141	500	350	250	305

NDF60/NDF80/NDF85/NDF100-38

NDF60/NDF80/NDF85/NDF100-38
Available in versions 496 kW up to 1669 kW.
Developed from field experiences in the European and overseas markets, the NDF series sets new standards in efficient and reliable operation. Developed to current and future test authority requirements in Europe. Delivered ready to install with pre-wired packaged control system and simple plug-in gas train arrangements.

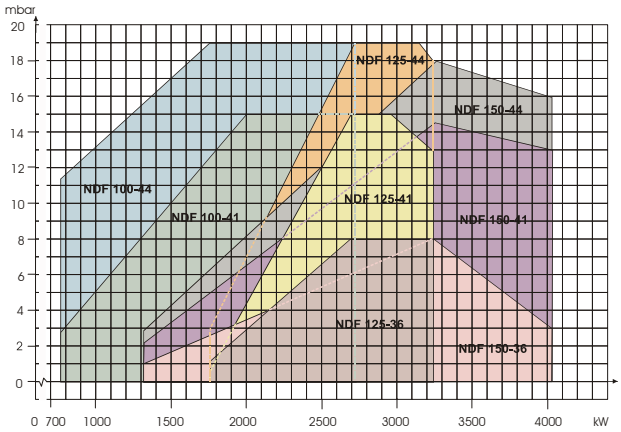




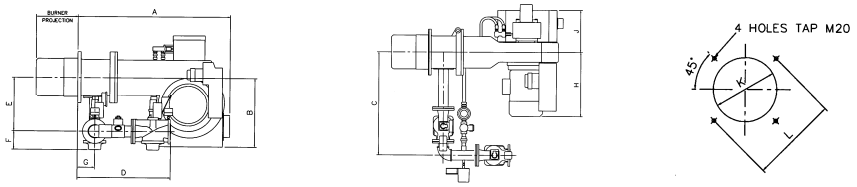
Burner	A	B	C	D	E	F	G	H	J	K	L
NDF60-28	1069	385	540	665	305	105	141	500	335	250	305
NDF60-34	1069	385	540	665	305	105	141	500	335	250	305
NDF60-38	1081	475	540	665	305	105	141	500	350	250	305
NDF80-28	1069	385	920	735	415	165	141	500	335	280	305
NDF80-34	1069	385	920	735	415	165	141	500	335	280	305
NDF85-38	1081	475	920	735	415	165	141	500	350	280	305
NDF100-38	1081	475	920	735	415	165	141	500	350	280	305

DUAL FUEL BURNERS

NDF100/NDF125/NDF150



NDF100/NDF125/NDF150
Available in versions 766 kW up to 2706 kW.
Developed from field experiences in the European and overseas markets, the NDF series sets new standards in efficient and reliable operation. Developed to current and future test authority requirements in Europe. Delivered ready to install with pre-wired packaged control system and simple plug-in gas train arrangements.



Burner	A	B	C	D	E	F	G	H	J	K	L
NDF100-41, 44	1245	560	955	760	445	165	141	600	385	350	454
NDF125-36, 41, 44	1245	560	955	760	445	165	141	600	385	350	454
NDF150-36, 41, 44	1245	560	925	760	410	165	141	600	385	350	454

‘P’ Burner Series

The ‘P’ series is a comprehensive range of packaged burners suitable for a wide variety of applications including large hot water and steam boilers, air heaters and process heating.

The rage covers oil, gas and dual fuel versions from 3.4 to 18 MW based upon nett CV of fuel.

PO Oil Burners
These are available in two standard forms for distillate or residual fuel oils but can be configured for other liquid fuels provided that a full specification (viscosity, specific gravity, composition and calorific value) is made available.

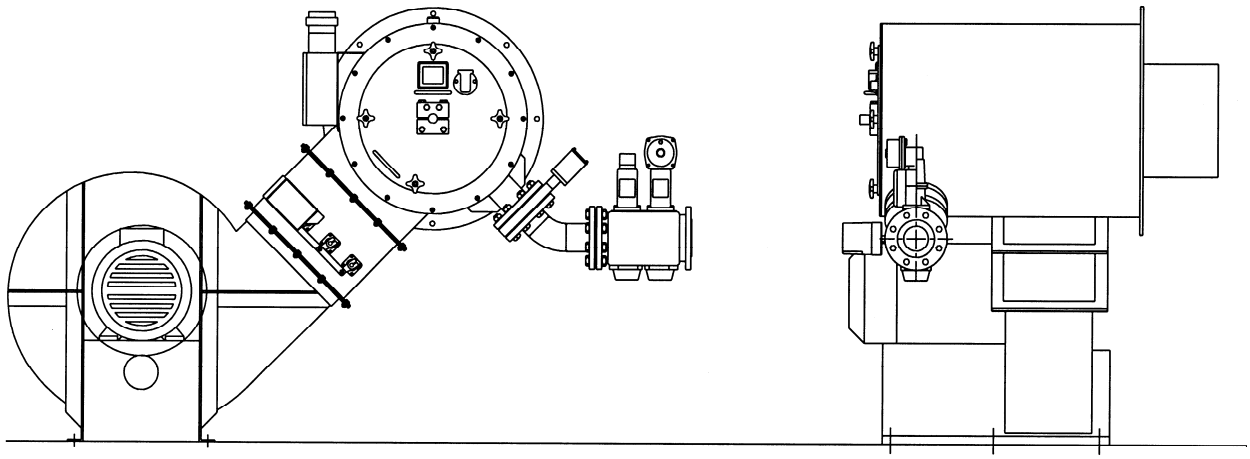
PG Gas Burners
In standard form the ‘PG’ series is configured for natural gas but versions are available for other types of manufactured gas, liquefied petroleum gas (LPG) and other special gases, e.g. biogas.

PDF Dual Fuel Burners
These combine the important design characteristics and performance advantages of the ‘PO’ and ‘PG’ burners.

In accordance with our uncompromising pursuit of optimum performances, each type of ‘P’ series burner has it’s own unique, purpose-designed burner head.

All burners are built to the highest standards of quality and reliability to meet current European Emission Standards, together with those of many other countries. All control systems and safety features comply with relevant burner standards and codes of practice.

Our policy of always seeking to offer the best technology in all areas of system specification. As an example, although other types of fully modulating control system can be fitted by special request, all ‘P’ series burners now incorporate Autoflame control system as standard. This microprocessor-based system extends the boundaries of modulating burner control by ensuring that the burner operates under optimum conditions at all times, thereby delivering substantial reductions in fuel consumption, operating costs and emissions of carbon dioxide, the principal greenhouse gas. The control system offers unprecedented accuracy in appliance control; when fitted to a boiler, for example, boiler temperature and pressure are not allowed to vary by more than 1°C or 1.5 psig respectively. Options for O_2 Trim, EGA and Variable Speed Control, are also available on request.



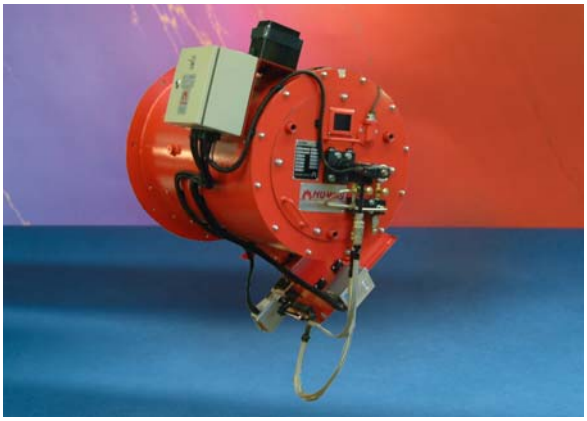
PG Gas Burner

The PG Series of fully automatic gas burner equipment is offered for industrial boiler and air heater applications.

This versatile range of fully modulating burners is available for Natural Gas. Special requirements on request i.e. Liquid Petroleum Gas / Town Gas.

Each burner system is made up of performance-matched units which together ensure safe, efficient and reliable operation.

POL Light Oil Burner
POG Heavy Oil Burner



The PO series of fully automatic oil burner equipment is offered for industrial boiler and air heater applications. This versatile range of fully modulating burners is available in two forms, Distillate or Residual fuels.

Each burner system is made up of performance-matched units which together ensure safe, efficient and reliable operation.

PDF Dual Fuel Burner

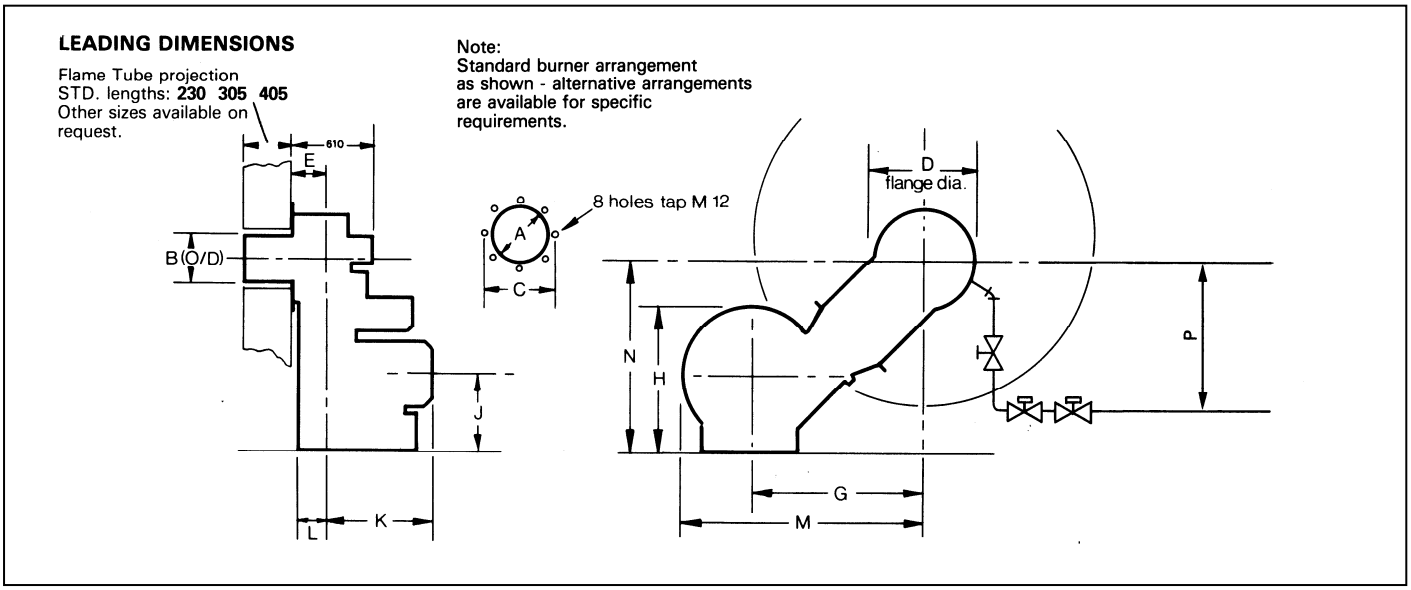
The PDF series of fully automatic dual fuel burner equipment is offered for industrial boiler and air heater applications.

This versatile range of fully modulating burners is available for dual fuel applications including Natural Gas (special requirements on request, i.e. Liquid petroleum Gas/Town Gas) and oil (Distillate or Residual fuels).

Each burner system is made up of performance-matched units which together ensure safe, efficient and reliable operation.

Other gases and specialist fuels available on request.

‘P’ Burner Series



Burner		A	B	C	D	E	G	H	J	K	L	M	N	P	Burner	A	B	Burner	A	B
PDF160/	3.7	375	334	610	660	276	965	855	500	640	195	1395	1025	900	POL160/	375	334	PG160/	375	334
	4.0	375	334	610	660	276	965	855	500	640	195	1395	1025	900		375	334		375	334
	4.4	375	334	610	660	276	965	855	500	640	195	1395	1025	900		375	334		375	334
	4.8	375	334	610	662	276	965	/55	500	640	195	1395	1025	900		375	334		375	334
PDF250/	5.1	375	334	672	724	304	925	855	475	640	195	1355	1025	900	POL250/	375	334	PG250/	400	359
	5.5	375	334	672	724	304	925	855	475	640	195	1355	1025	900		375	334		400	359
	6.0	375	334	672	724	304	925	/55	475	640	195	1355	1025	900		375	334		400	359
	6.2	400	359	672	724	304	925	855	475	640	195	1355	1025	900		400	359		400	359
	6.6	400	359	672	724	304	925	855	475	640	195	1355	1025	900		400	359		400	359
	7.0	400	359	672	724	304	1070	915	495	660	215	1520	1165	900		400	359		400	359
	7.3	400	359	672	724	304	1070	915	495	660	215	1520	1165	900		400	359		400	359
PDF310/	7.7	425	385	672	724	334	1076	920	495	660	215	1526	1275	900	POL310/	425	385	PG 310/	450	410
	8.0	425	385	672	724	334	1076	920	495	660	215	1526	1275	900		425	385		450	410
	8.4	425	385	672	724	334	1076	920	495	660	220	1526	1275	900		425	385		450	410
	8.8	425	385	672	724	334	1165	1110	660	665	220	1640	1400	900		425	385		450	410
	9.2	425	385	672	724	334	1165	1110	660	665	260	1640	1400	900		425	385		450	410
PDF400/	9.5	450	410	672	724	334	1155	1115	660	805	260	1635	1410	975	POL400/	450	410	PG 400/	450	410
	9.9	450	410	672	724	334	1155	1115	660	805	260	1635	1410	975		450	410		450	410
	10.3	450	410	672	724	334	1155	1115	660	805	260	1635	1410	975		450	410		450	410
	10.6	450	410	672	724	334	1155	1115	660	805	260	1635	1410	975		450	410		450	410
	11.0	450	410	672	724	334	1155	1115	660	805	260	1635	1410	975		450	410		450	410
	11.4	450	410	672	724	334	1155	1115	660	805	260	1635	1410	975		450	410		450	410
	11.7	450	410	672	724	334	1155	1115	660	805	260	1635	1410	975		450	410		450	410
PDF490/	12.1	475	436	672	724	334	1155	1115	660	805	260	1635	1410	975	POL490/	450	410	PG 490/	475	436
	12.5	475	436	672	724	334	1155	1115	660	805	260	1635	1410	975		450	410		475	436
	12.8	475	436	672	724	334	1205	1205	710	800	235	1735	1400	975		450	410		475	436
	13.2	475	436	672	724	334	1205	1205	710	800	235	1735	1400	975		475	436		475	436
	13.6	475	436	672	724	334	1205	1205	710	800	235	1735	1400	975		475	436		475	436
	13.9	475	436	672	724	334	1205	1205	710	800	235	1735	1400	975		475	436		475	436
	14.3	475	436	672	724	334	1205	1208	710	800	235	1735	1400	975		475	436		475	436
PDFL PO/PG 575/660	Available on application																			

‘P’ Burner Series

Burner Designation

P O G 310 / 8.4

Burner Prefix

Fuel Type
O - Oil
G - Gas
DF - Dual Fuel

Fuel Sub Type
G - Residual Oil
L - Light Oil
N - Natural Gas
L - LPG

Burner Casing Size

Burner Max. Power MW

Burner Designation	Output MW
160 / 3.7	3.3
160 / 4.0	3.6
160 / 4.4	3.9
160 / 4.8	4.3
250 / 5.1	4.6
250 / 5.5	5.4
250 / 6.0	5.4
250 / 6.2	5.6
250 / 6.6	5.9
250 / 7.0	6.3
250 / 7.3	6.6
310 / 7.7	6.9
310 / 8.0	7.2
310 / 8.4	7.6
310 / 8.8	7.9
310 / 9.2	8.3
400 / 9.5	8.5
400 / 9.9	8.9
400 / 10.3	9.3
400 / 11.0	9.9
400 / 11.4	10.3
400 / 11.7	10.5
490 / 12.1	10.9
490 / 12.5	11.2
490 / 12.8	11.5
490 / 13.2	11.9
490 / 13.6	12.2
490 / 13.9	12.5
490 / 14.3	12.9
575 / 14.7	13.2
575 / 15.0	13.5
575 / 15.4	13.9
575 / 15.8	14.2
575 / 16.1	14.5
575 / 16.5	14.9
575 / 16.9	15.2
660 / 17.2	15.5
660 / 17.6	115.9
660 / 18.0	16.2
660 / 18.3	16.5
660 / 18.7	16.9
660 / 19.0	17.1
660 / 19.4	17.5
660 / 20.0	18.0

Autoflame

Autoflame Mini Mk 7 EVO Features & Benefits:

- Micro Modulation – fuel/air ratio control
- 2 fuel curve capability
- 1 VSD channel control
- Internal flame safeguard control
- UV and IR detection
- Ionisation rod detection
- Lead lag (Intelligent Boiler Sequencing – IBS)
- Precise target set point control (PID)
- 3 Parameter trim, O_2, CO_2 & CO
- Outdoor reset
- NFPA compliant
- NEMA4/IP65 enclosure
- Keypad pushbutton control
- 20 x 4 line LCD display
- Error diagnostic codes displayed
- Single point change facility for commissioned fuel/air ratio
- User definable optimum ignition position
- FGR management
  - delay from start-up of FGR until flue gas temperature, boiler set point or time delay achieved

Specification

- 120/230V, 50/60 Hz switch able standard operation
- IP65/NEMA 4 enclosure with panel fascia mounting
- Manufactured under BS EN ISO 9001:2000

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