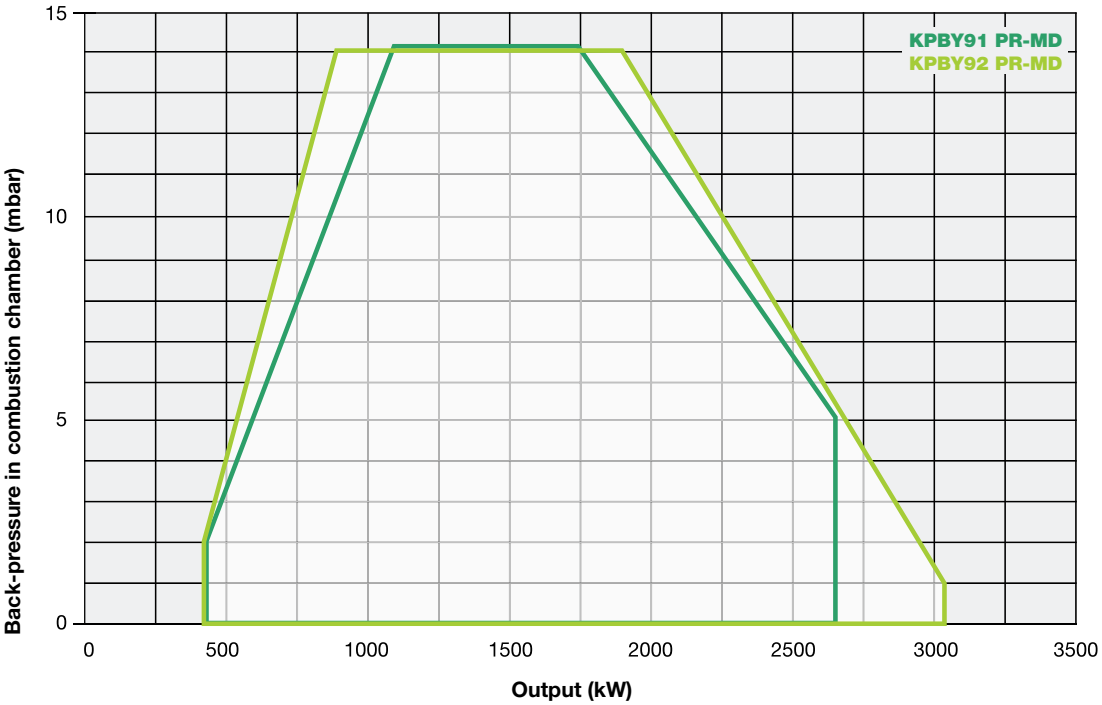
KPBY91 KPBY92 novanta SERIES

PNEUMATIC ATOMIZATION WITH ELECTRONIC OPERATION
with viscosity up to 4000 cSt at 50°C (530°E at 50°C)

This particular GAS/HEAVY OIL burners series has been developed in order to use compressed air or, alternatively, steam as a fluid to atomize the fuel, with the aim to achieve a better combustion result compared to the one gained using the traditional atomizing systems.
These burners are provided with a low pressure nozzle which allows consumption levels to be kept low and which also limits the general wear of the whole atomization system.
All burners are progressive and are completed with an electrical control cabinet and with a pump oil to be installed by the final user. Furthermore, the nozzle performs an automatic cleaning process at the end of each cycle.
The plant must be provided with compressed air or steam at 6-10 bar.
Burners are ignited through a pilot which can work either with natural gas or LPG and are suitable to be used with fuels with a viscosity up to 4.000 cSt at 50°C (530°E at 50°).
The standard version of burners is set up to atomize with compressed air only; when steam is requested for the atomization, the burner will be modified though a specific kit.
However, compressed air must be always present at the burner in the following cases:
- cold start ups when no steam is available
- valve opening for automatic nozzle cleaning.



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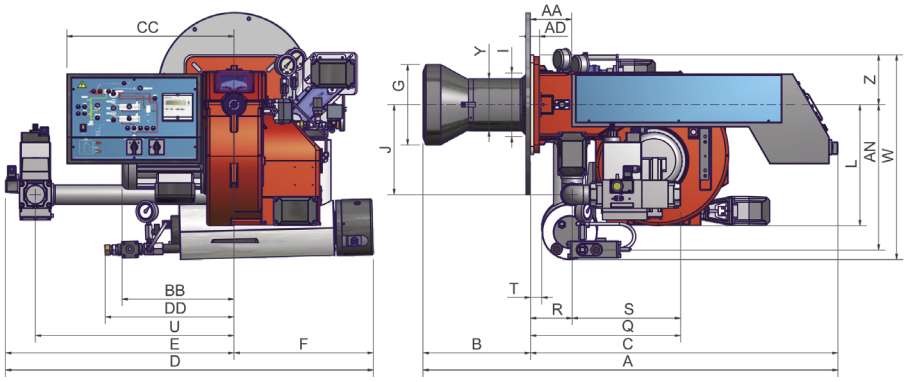
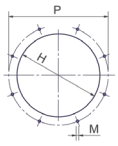
TECHNICAL DETAILS

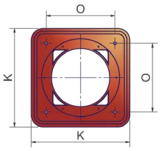
Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor	Pump motor	Resistor	Gas connections
		min.	max.			kW	kW	kW	Rp
KPBY91	MH.xx.S.xx.A.1.xxx.xx	480	2.670	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4,0	0,75	8,0	2" - DN65 - DN80 - DN100
KPBY92	MH.xx.S.xx.A.1.xxx.xx	480	3.050	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	0,75	12,0	2" - DN65 - DN80 - DN100

For the configuration of the gas train, see page 112-113.

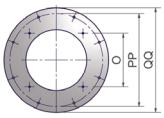




Suggested boiler drilling



Burner flange



Controflangia

Low pressure pump set (pump, motor and filter) is included, but supplied loose (not assembled on the burner).

Type	Model	Overall dimensions (mm)																															
		DN	A	AA	AN	B*	BB	C	CC	D	DD	E	F	G	H	J	K	L	M	O		P	R	S	U	V	W	Z	T	Y	PP	QQ
																				min.	max												
KPBY91	MH.xx.x.xx.1.50	50	1475	240	600	490	419	985	532	1372	510	852	520	365	405	456	360	550	M12	280	310	500	166	374	624	-	798	185	43	228	500	550
KPBY91	MH.xx.x.xx.1.65	65	1475	240	600	490	419	985	532	1569	510	1049	520	365	405	456	360	550	M12	280	310	500	166	483	843	292	798	185	43	228	500	550
KPBY91	MH.xx.x.xx.1.80	80	1475	240	600	490	419	985	532	1604	510	1084	520	365	405	456	360	550	M12	280	310	500	166	535	875	322	798	185	43	228	500	550
KPBY91	MH.xx.x.xx.1.100	100	1475	240	600	490	419	985	532	1687	510	1167	520	365	405	456	360	550	M12	280	310	500	166	642	942	382	798	185	43	228	500	550
KPBY92	MH.xx.x.xx.1.50	50	1475	240	600	490	419	985	532	1372	510	852	520	365	405	456	360	550	M12	280	310	500	166	374	624	-	798	185	43	228	500	550
KPBY92	MH.xx.x.xx.1.65	65	1475	240	600	490	419	985	532	1569	510	1049	520	365	405	456	360	550	M12	280	310	500	166	483	843	292	798	185	43	228	500	550
KPBY92	MH.xx.x.xx.1.80	80	1475	240	600	490	419	985	532	1604	510	1084	520	365	405	456	360	550	M12	280	310	500	166	535	875	322	798	185	43	228	500	550
KPBY92	MH.xx.x.xx.1.100	100	1475	240	600	490	419	985	532	1687	510	1167	520	365	405	456	360	550	M12	280	310	500	166	642	942	382	798	185	43	228	500	550

Approximate values
* The dimension B is reduced by 20 mm with counterflange and gasket.

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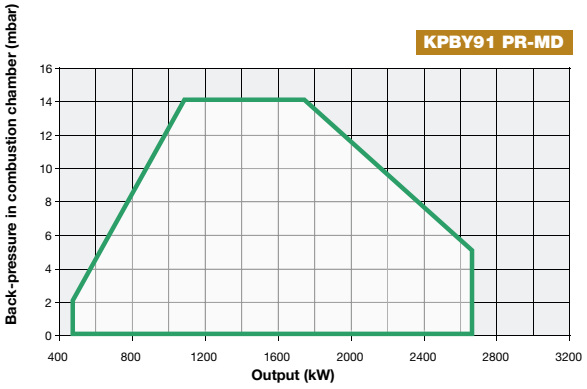

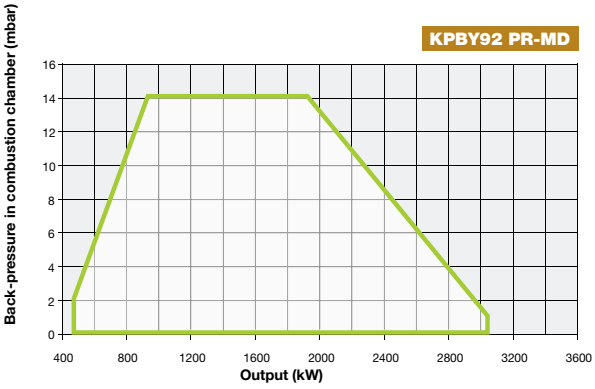

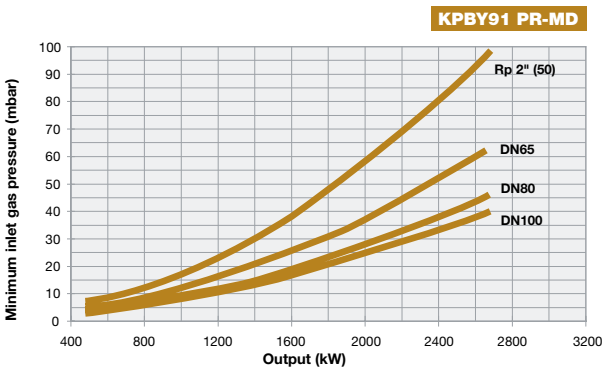

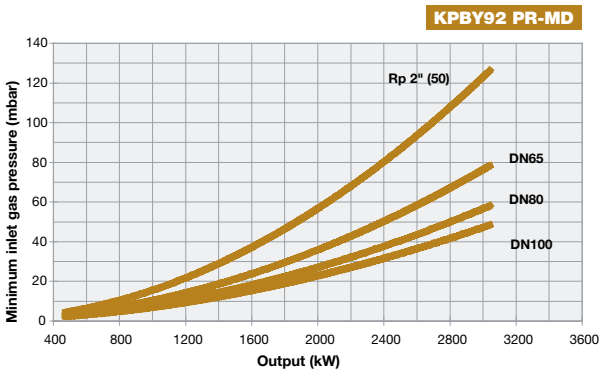

Attention: the graph shows the value of the gas output (kW) against the corresponding pressure without the combustion chamber back pressure. To know the minimum gas pressure at gas train, in order to get the gas output, it is necessary to add the boiler back pressure to the value read on the curve.