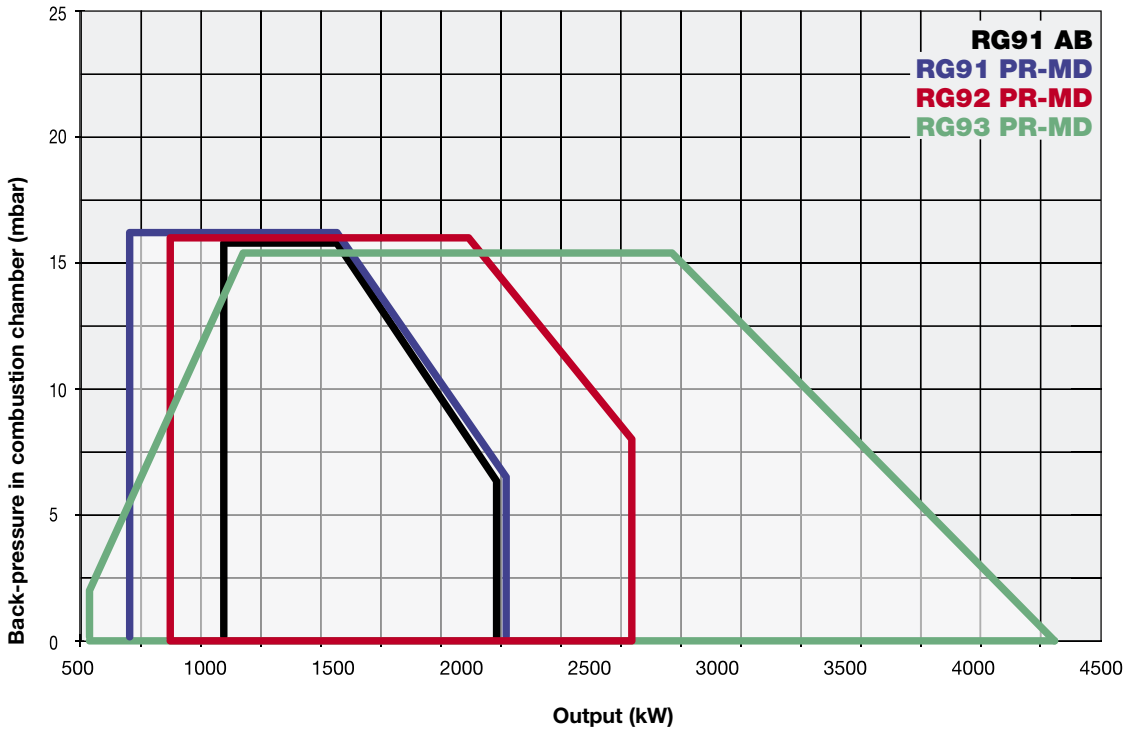
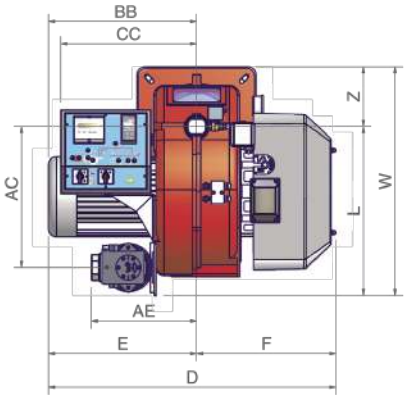
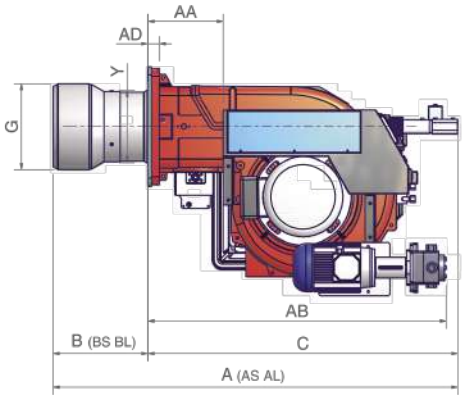
This series of monoblock burners made of a solid die-cast aluminium housing, represents the outcome of our experience in the field of medium-large capacity burners. This version of burners features a centrifugal air fan activated by a three phase motor, while the oil pump works through a dedicated motor.
The burners of series NOVANTA, have a capacity up to 4100 kW.
Both series are equipped with a by-passing nozzle that allows a modulating ratio of 1:3.
The light oil output can be adjusted through a pressure regulator which effects on the return pipe line.
All burners have a control panel which includes the control box and the regulators of temperature and pressure. Furthermore they are equipped with a mimic diagram with lamps showing the sequential stages of the burner operation.

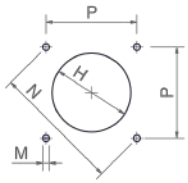


TECHNICAL DETAILS

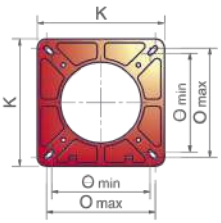
Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor	Pump motor	Noise level
		min.	max.			kW	kW	dBA
RG91	G-.AB.x.xx.A	1.047	2.093	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4,0	1,1	74,5
RG91	G-.xx.x.xx.A	698	2.093	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	4,0	1,1	74,5
RG92	G-.xx.x.xx.A	849	2.558	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	5,5	1,1	76,9
RG93	G-.xx.x.xx.A	550	4.100	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	1,1	77,4







Suggested boiler drilling



Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
RG91	1730	1280	1020	230
RG92	1730	1280	1020	270
RG93	1730	1430	1130	290

Approximate values

Type	Model	Overall dimensions (mm)																										
		AA	AS	AL	AB	AC	AD	AE	BB	BS	BL	C	CC	D	E	F	G	H	K	L	M	N	O		P	W	Y	Z
																							min.	max.				
RG91	G-.xx.x.xx.A	242	1259	1432	925	436	35	327	419	300	473	959	422	853	419	434	238	268	360	523	M12	424	280	310	300	708	228	185
RG92	G-.xx.x.xx.A	242	1253	1426	925	436	35	327	419	294	467	959	422	853	419	434	266	296	360	523	M12	424	280	310	300	708	228	185
RG93	G-.xx.x.xx.A	242	1260	1450	925	436	35	327	460	301	491	959	422	894	460	434	292	322	360	523	M12	424	280	310	300	708	228	185

Approximate values

MECHANICAL OPERATION

		RG91		RG92		RG93	
Model	Operation	Code	Price €	Code	Price €	Code	Price €
G-.AB.S.xx.A	AB	012050902		-		-	
G-.PR.S.xx.A	PR (*)	012050903		012051103		012051303	

S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(*) Progressive PR control, for modulating version MD add € (see price list)
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

ELECTRONIC OPERATION

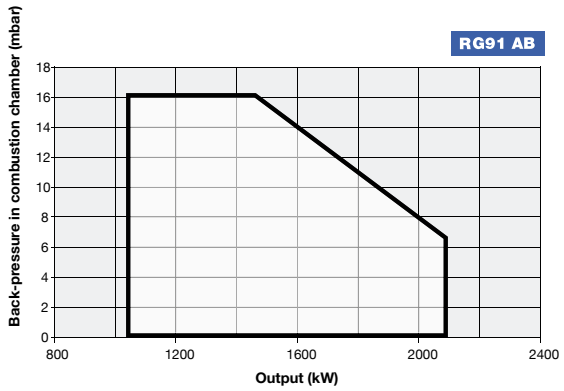
		RG91		RG92		RG93	
Model	Operation	Code	Price €	Code	Price €	Code	Price €
G-.PR.S.xx.A.EA	PR (*)	01205090A		01205110A		01205130A	

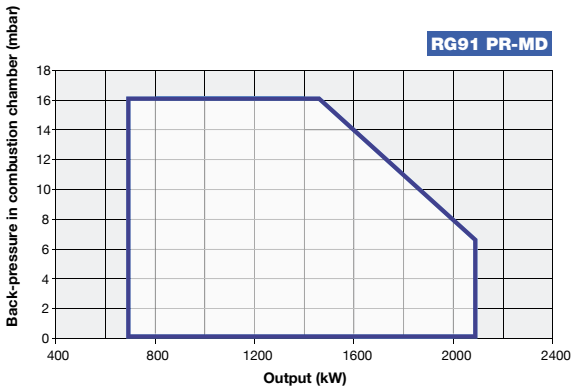
S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(*) Progressive PR control, for modulating version MD add € (see price list)
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

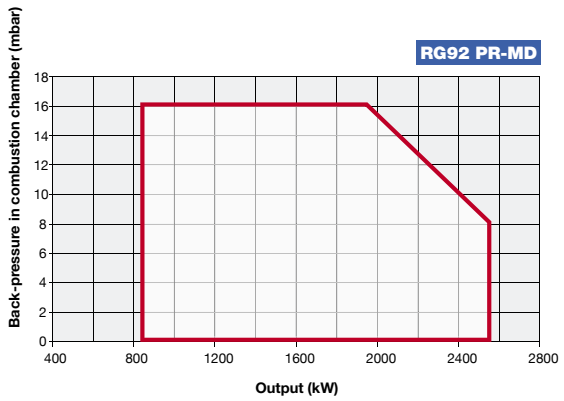
ELECTRONIC OPERATION

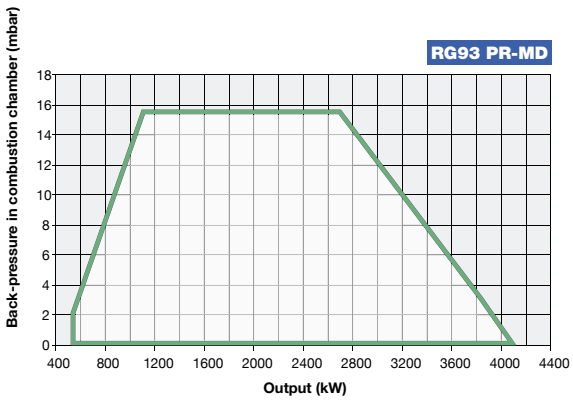
		RG91		RG92		RG93	
Model	Operation	Code	Price €	Code	Price €	Code	Price €
G-.MD.S.xx.A.ES	MD (**)	01205090S		01205110S		01205130S	

S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(**) The burners are already MD version.
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

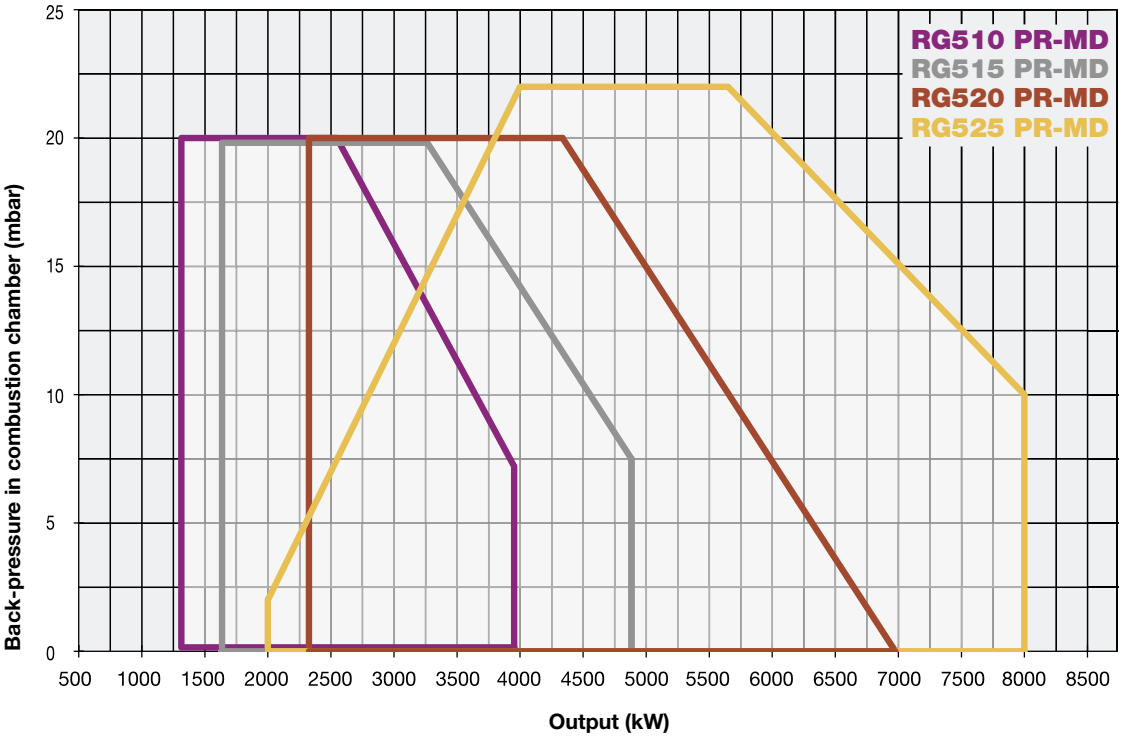

RG91 AB
Back-pressure in combustion chamber (mbar)
0
2
4
6
8
10
12
14
16
18
800
1200
1600
2000
2400
Output (kW)


RG91 PR-MD
Back-pressure in combustion chamber (mbar)
0
2
4
6
8
10
12
14
16
18
400
800
1200
1600
2000
2400
Output (kW)


RG92 PR-MD
Back-pressure in combustion chamber (mbar)
0
2
4
6
8
10
12
14
16
18
400
800
1200
1600
2000
2400
2800
Output (kW)


RG93 PR-MD
Back-pressure in combustion chamber (mbar)
0
2
4
6
8
10
12
14
16
18
400
800
1200
1600
2000
2400
2800
3200
3600
4000
4400
Output (kW)

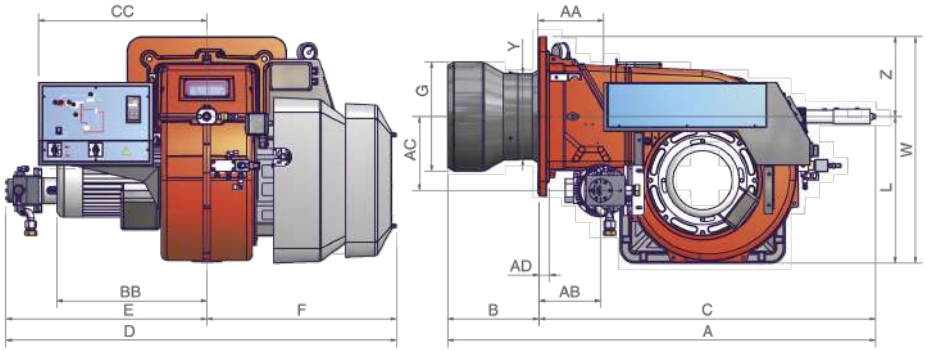
This series of monoblock burners made of a solid die-cast aluminium housing, represents the outcome of our experience in the field of medium-large capacity burners.
This version of burners features a centrifugal air fan activated by a three phase motor, while the oil pump works through a dedicated motor.
The burners of series CINQUECENTO, have a capacity up to 8000 kW.
Both series are equipped with a by-passing nozzle that allows a modulating ratio of 1:3.
The light oil output can be adjusted through a pressure regulator which has effects on the return pipe line.
All burners have a control panel which includes the control box and the regulators of temperature and pressure. Furthermore they are equipped with a mimic diagram with lamps showing the sequential stages of the burner operation.

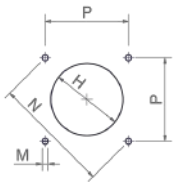


RG510 RG515 RG520 RG525 cinquecento SERIES

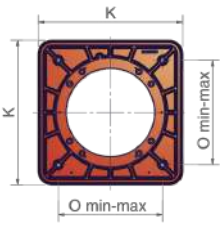
TECHNICAL DETAILS

Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor	Pump motor	Noise level
		min.	max.			kW	kW	dBA
RG510	G-.xx.x.xx.A	1.314	3.953	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	7,5	1,1	81,7
RG515	G-.xx.x.xx.A	1.628	4.884	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	11,0	1,5	82,3
RG520	G-.xx.x.xx.A	2.326	6.977	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	15,0	1,5	83,2
RG525	G-.xx.x.xx.A	2.000	8.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	18,5	3,0	84,9





Suggested boiler drilling



Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
RG510/515/520	1720	1500	1150	330
RG525	1800	1500	1300	350

Approximate values

Type	Model	Overall dimensions (mm)																								
		AA	AS	AL	AB	AC	AD	BB	BS	BL	C	CC	D	E	F	G	H	K	L	M	N	O	P	W	Y	Z
RG510	G-.xx.x.xx.A	219	1451	1671	217	246	35	468	310	530	1141	571	1314	671	643	329	369	540	496	M14	552	390	390	766	328	270
RG515	G-.xx.x.xx.A	219	1451	1671	217	246	35	508	310	530	1141	571	1324	681	643	350	390	540	496	M14	552	390	390	766	328	270
RG520	G-.xx.x.xx.A	219	1451	1671	207	250	35	508	310	530	1141	571	1324	681	643	370	410	540	496	M14	552	390	390	880	328	270
RG525	G-.xx.x.xx.A	219	1511	1691	197	275	35	650	350	530	1161	571	1341	698	643	434	484	540	496	M14	552	390	390	938	434	270

Approximate values

MECHANICAL OPERATION

		RG510		RG515	
Model	Operation	Code	Price €	Code	Price €
G-.PR.S.xx.A	PR (*)	029050103		029050303	

		RG520		RG525	
Model	Operation	Code	Price €	Code	Price €
G-.PR.S.xx.A	PR (*)	029050503		029050703	

S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(*) Progressive PR control, for modulating version MD add € (see price list)
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

ELECTRONIC OPERATION

		RG510		RG515	
Model	Operation	Code	Price €	Code	Price €
G-.PR.S.xx.A.EA	PR (*)	02905010A		02905030A	

		RG520		RG525	
Model	Operation	Code	Price €	Code	Price €
G-.PR.S.xx.A.EA	PR (*)	02905050A		02905070A	

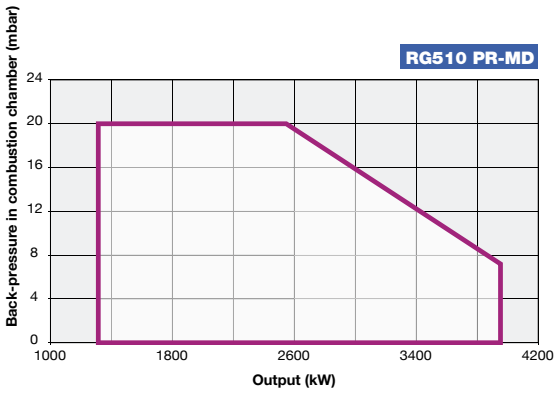
S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(*) Progressive PR control, for modulating version MD add € (see price list)
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

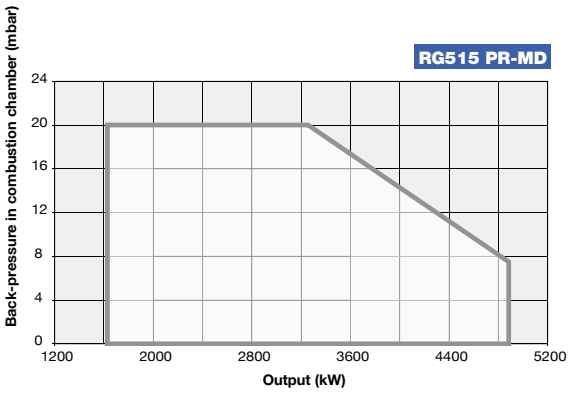
ELECTRONIC OPERATION

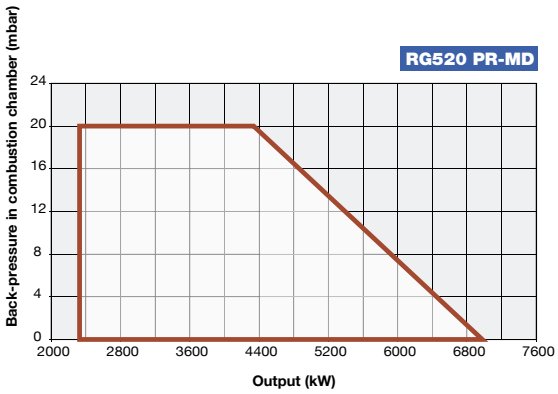
		RG510		RG515	
Model	Operation	Code	Price €	Code	Price €
G-.MD.S.xx.A.ES	MD (**)	02905010S		02905030S	

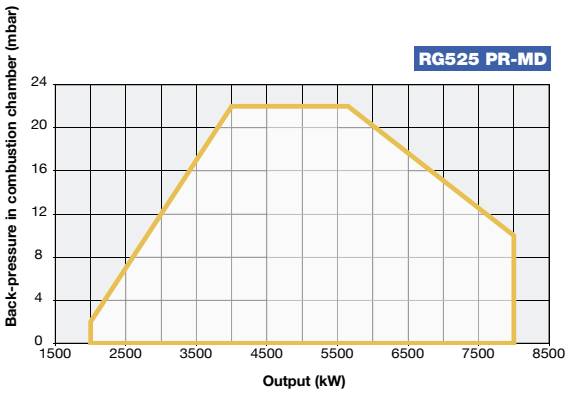
		RG520		RG525	
Model	Operation	Code	Price €	Code	Price €
G-.MD.S.xx.A.ES	MD (**)	02905050S		02905070S	

S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(**) The burners are already MD version. In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE


RG510 PR-MD
Back-pressure in combustion chamber (mbar)
0
4
8
12
16
20
24
1000
1800
2600
3400
4200
Output (kW)

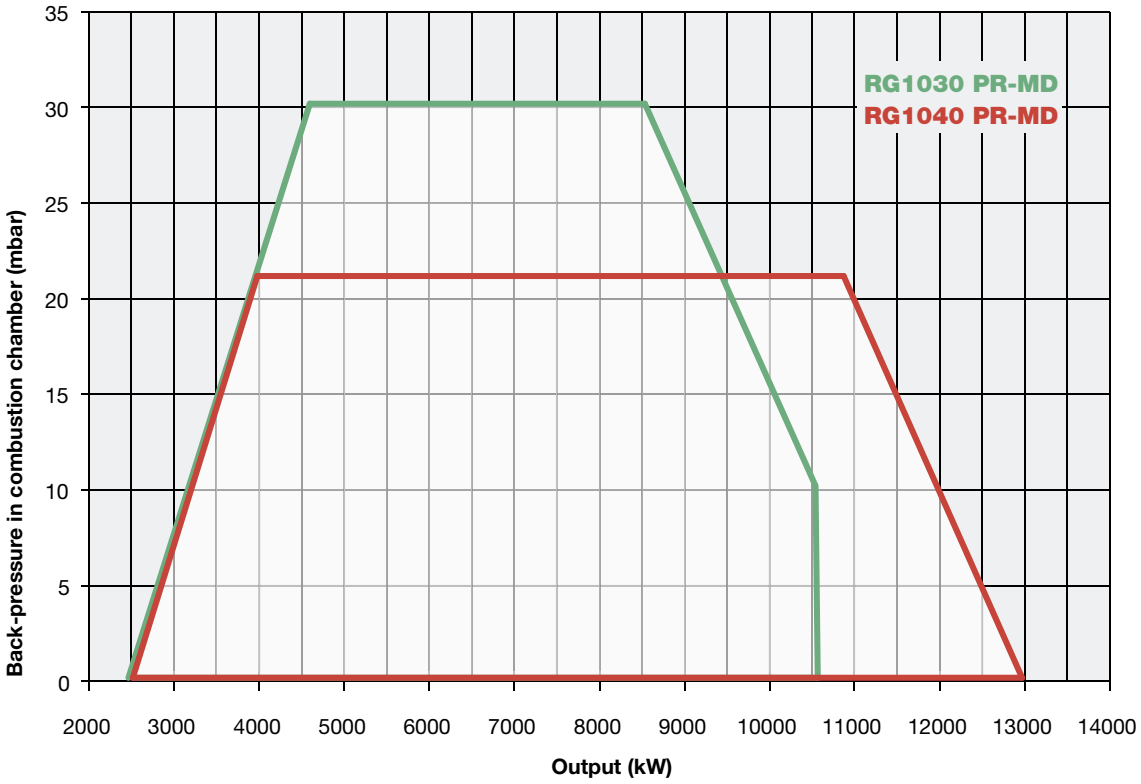

RG515 PR-MD
Back-pressure in combustion chamber (mbar)
0
4
8
12
16
20
24
1200
2000
2800
3600
4400
5200
Output (kW)


RG520 PR-MD
Back-pressure in combustion chamber (mbar)
0
4
8
12
16
20
24
2000
2800
3600
4400
5200
6000
6800
7600
Output (kW)


RG525 PR-MD
Back-pressure in combustion chamber (mbar)
0
4
8
12
16
20
24
1500
2500
3500
4500
5500
6500
7500
8500
Output (kW)

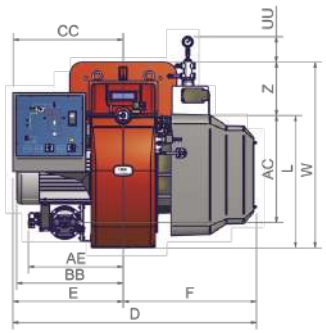
This series of monoblock burners made of a solid die-cast aluminium housing, represents the outcome of our experience in the field of medium-large capacity burners. This version of burners features a centrifugal air fan activated by a three phase motor, while the oil pump works through a dedicated motor.
This range of the series MILLE has a capacity from 2.550 kW to 13.000 kW.
Both series are equipped with a by-passing nozzle that allows a modulating ratio of 1:3.
The light oil output can be adjusted through a pressure regulator which has effects on the return pipe line.
All burners have a control panel which includes the control box and the regulators of temperature and pressure. Furthermore they are equipped with a mimic diagram with lamps showing the sequential stages of the burner operation.

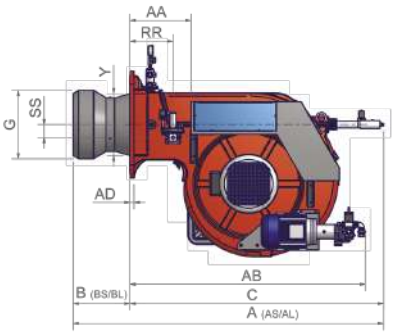
Electronic set up (optional)

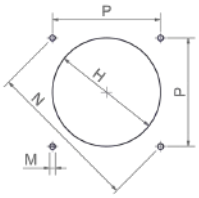


TECHNICAL DETAILS

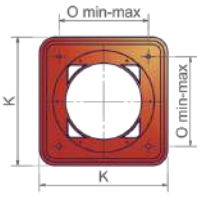
Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor	Pump motor	Noise level
		min.	max.			kW	kW	dBA
RG1030	G-.xx.x.xx.A	2.550	10.600	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	22	4	85,6
RG1040	G-.xx.x.xx.A	2.550	13.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	30	5,5	85,6







Suggested boiler drilling



Burner flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
RG1030/1040	2270	1720	1320	700

Approximate values

Type	Model	Overall dimensions (mm)																												
		A (AS)	A (AL)	AA	AB	AC	AD	AE	B (BS)	B (BL)	BB	C	CC	D	E	F	G	H	K	L	M	N	O	P	RR	SS	UU	W	Y	Z
RG1030	G-.xx.x.xx.A	1914	2108	377	1452	651	25	585	350	544	657	1564	680	1502	680	822	422	472	660	816	M16	651	460	460	265	80	142	1146	379	330
RG1040	G-.xx.x.xx.A	1925	2119	377	1452	651	25	585	350	544	657	1575	680	1502	680	822	671	731•	660	816	M16	651	460	460	265	80	142	1146	404	330

Approximate values

- Install a counter-flange between the burner and the boiler or in alternative, drill the H hole smaller but higher than the Y point and assemble the combustion head inside the boiler.

MECHANICAL OPERATION

Model	Operation	RG1030 Code	RG1030 Price €	RG1040 Code	RG1040 Price €
G-.PR.S.xx.A	PR (*)	023050903		023051103	

S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(*) Progressive PR control, for modulating version MD add € (see price list)
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

ELECTRONIC OPERATION

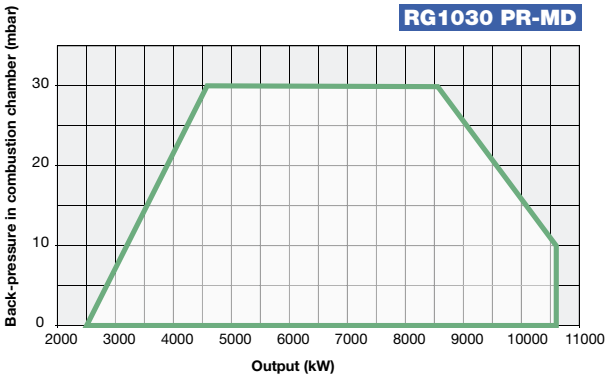
Model	Operation	RG1030 Code	RG1030 Price €	RG1040 Code	RG1040 Price €
G-.PR.S.xx.A.EA	PR (*)	02305090A		02305110A	

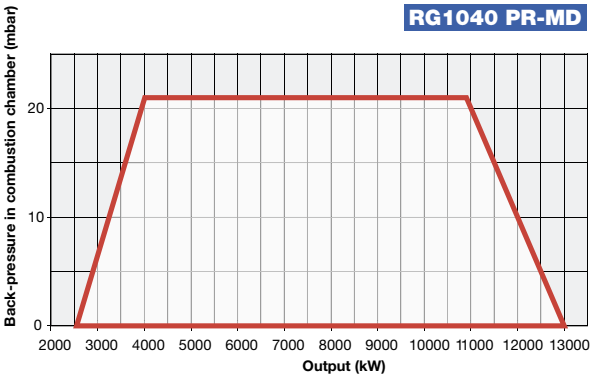
S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(*) Progressive PR control, for modulating version MD add € (see price list)
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE

ELECTRONIC OPERATION

Model	Operation	RG1030 Code	RG1030 Price €	RG1040 Code	RG1040 Price €
G-.MD.S.xx.A.ES	MD (**)	02305090S		02305110S	

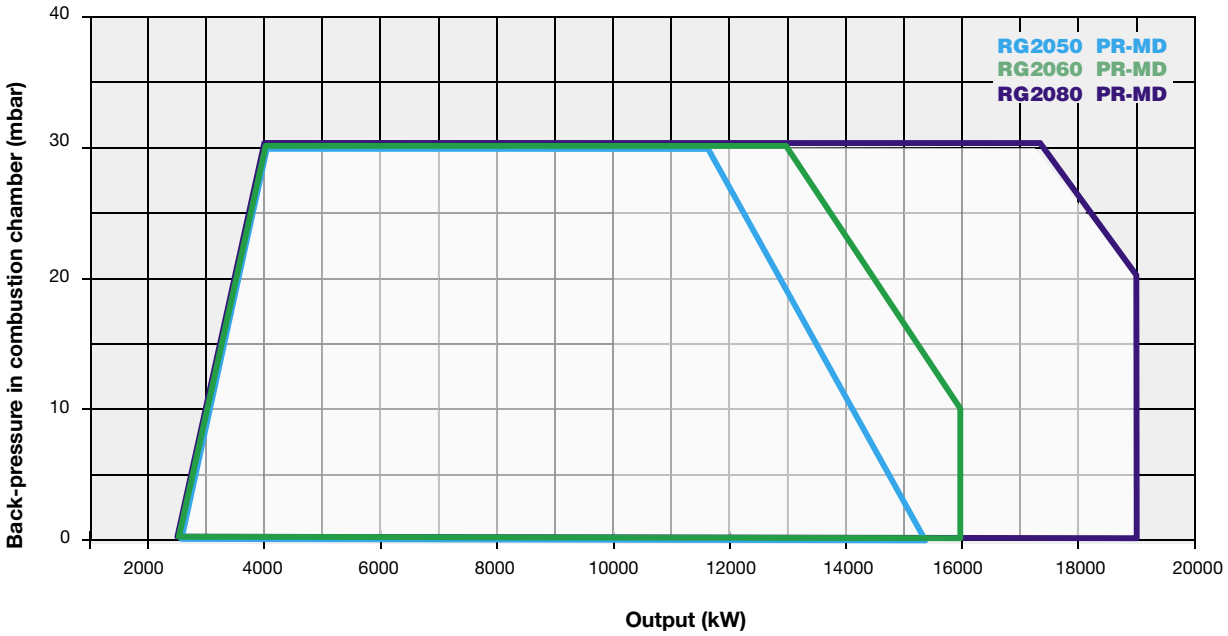
S = Standard combustion head (BS)
L = For long combustion head version (BL) increase the price (see price list)
(**) The burners are already MD version.
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).
In compliance with:
- Low Tension Directive 2014/35/UE - Electromagnetic Compatibility Directive 2014/30/UE - Machinery Directive 2006/42/CE





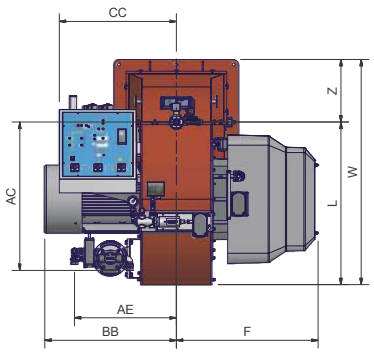
RG2050 RG2060 RG2080 duemila SERIES

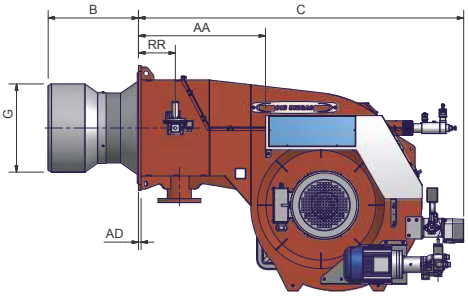
This series of monoblock burners made of a solid die-cast aluminium housing, represents the outcome of our experience in the field of medium-large capacity burners. This version of burners features a centrifugal air fan activated by a three phase motor, while the oil pump works through a dedicated motor.
The series DUEMILA has a capacity from 2.500 kW to 19.000 kW.
Both series are equipped with a by-passing nozzle that allows a modulating ratio of 1:3.
The light oil output can be adjusted through a pressure regulator which has effects on the return pipe line.
All burners have a control panel which includes the control box and the regulators of temperature and pressure. Furthermore they are equipped with a mimic diagram with lamps showing the sequential stages of the burner operation.

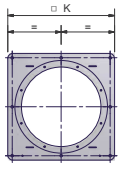


TECHNICAL DETAILS

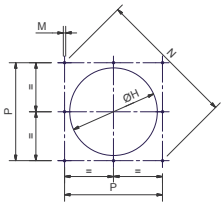
Type	Model	Output kW		Auxiliary electrical power supply	Motor electrical power supply	Fan motor	Pump motor	Noise level
		min.	max.			kW	kW	dBA
RG2050	G-.xx.x.xx.A	2.500	15.200	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	37	5,5	92,5
RG2060	G-.xx.x.xx.A	2.500	16.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	45	5,5	91,7
RG2080	G-.xx.x.xx.A	2.500	19.000	230 V 1N AC 50 Hz	400 V 3 AC 50 Hz	55	5,5	91,7



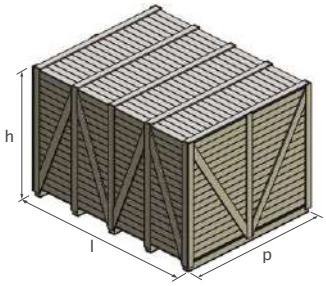




Burner flange



Suggested boiler drilling



Type	Packaging dimensions (mm)			
	l	p	h	kg
RG2050	2396	1886	1969	1290
RG2060	2396	1886	1969	1370
RG2080	2396	1886	1969	1470

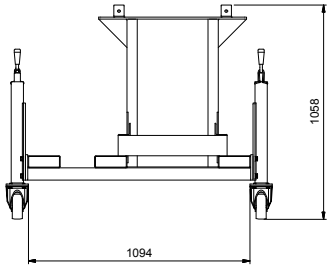
Approximate values

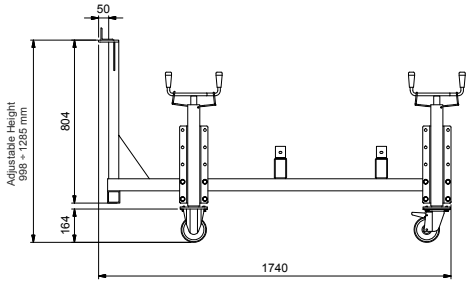
Type	Model	Overall dimensions (mm)																		
		AA	AC	AD	AE	B	BB	C	CC	F	G	H	K	L	M	N	P	RR	W	Z
RG2050	G-.xx.x.xx.A	741	866	15	595	*	768	1898	735	827	*	*	730	949	M16	948	670	215	1314	365
RG2060	G-.xx.x.xx.A	741	866	15	645	*	807	1890	735	846	*	*	850	949	M16	1117	790	215	1374	425
RG2080	G-.xx.x.xx.A	741	866	15	645	*	885	1890	735	846	*	*	850	949	M16	1117	790	215	1374	425

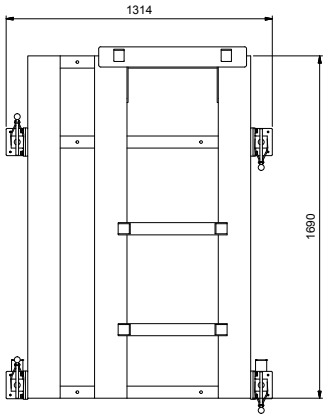
* The B, G, H dimensions must be confirmed from our technical DPT.
Approximate values

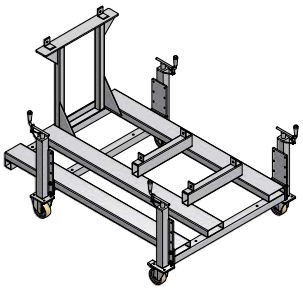
Monoblock burners 2000 series are supplied complete with a steel supporting frame; burner installation and manutention are greatly simplified.
The frame is equipped with wheels to easily move the burner, and its height is adjustable to match any type of boiler or furnace.

SUPPORTING FRAME FOR BURNERS 2050 SERIES

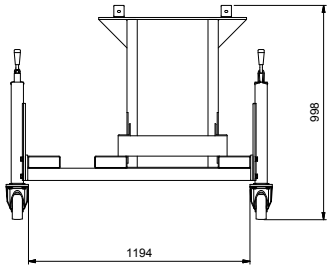


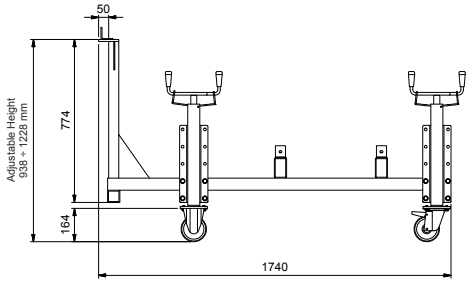


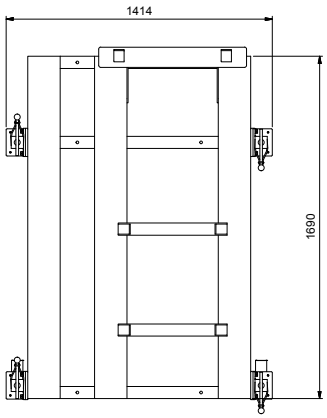


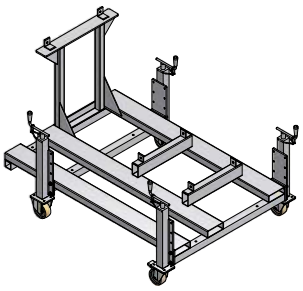


SUPPORTING FRAME FOR BURNERS 2060/2080 SERIES









ELECTRONIC OPERATION

		RG2050		RG2060		RG2080	
Model	Operation	Code	Price €	Code	Price €	Code	Price €
G-.PR.S.xx.A.EA	PR (*)	03205015A		-		-	

(*) Progressive PR control, for modulating version MD add € (see price list)
In the full modulating version MD in order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

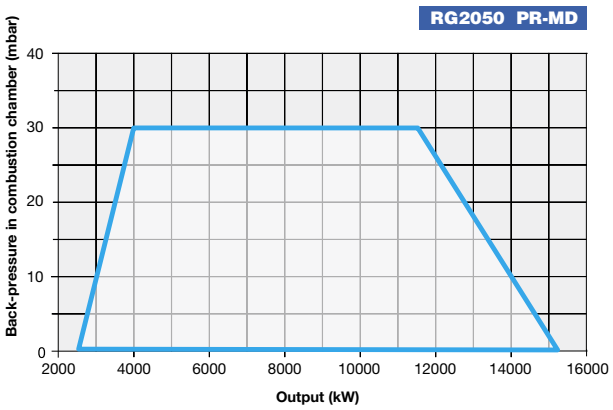
In compliance with:
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE

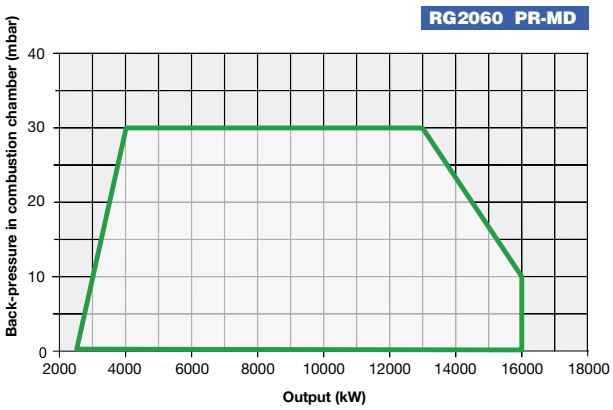
ELECTRONIC OPERATION

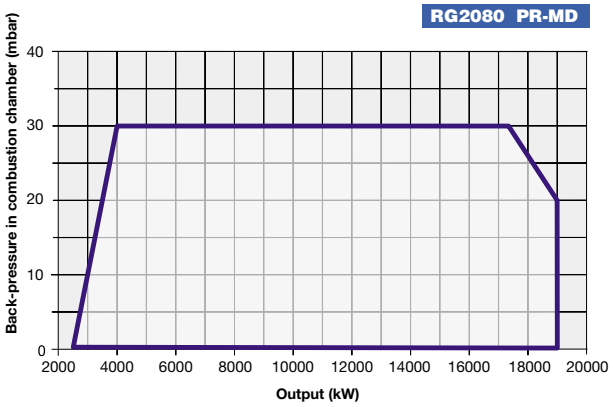
		RG2050		RG2060		RG2080	
Model	Operation	Code	Price €	Code	Price €	Code	Price €
G-.MD.S.xx.A.ES	MD (**)	03205015S		03205025S		03205035S	

(**) The burners are already MD version.
In order for the supply to be completed, the burner must be equipped with the respective modulating probe (see accessory table, page 282).

In compliance with:
- Low Tension Directive 2014/35/UE
- Electromagnetic Compatibility Directive 2014/30/UE
- Machinery Directive 2006/42/CE


RG2050 PR-MD
Back-pressure in combustion chamber (mbar)
0
10
20
30
40
2000
4000
6000
8000
10000
12000
14000
16000
Output (kW)


RG2060 PR-MD
Back-pressure in combustion chamber (mbar)
0
10
20
30
40
2000
4000
6000
8000
10000
12000
14000
16000
18000
Output (kW)


RG2080 PR-MD
Back-pressure in combustion chamber (mbar)
0
10
20
30
40
2000
4000
6000
8000
10000
12000
14000
16000
18000
20000
Output (kW)

HEAVY OIL BURNERS

mechanical atomization
novanta series

PN91 - AB/PR/MD
PN92 - PR/MD
PN93 - PR/MD

mechanical atomization
cinquecento series

RN510 - PR/MD
RN515 - PR/MD
RN520 - PR/MD
RN525 - PR/MD

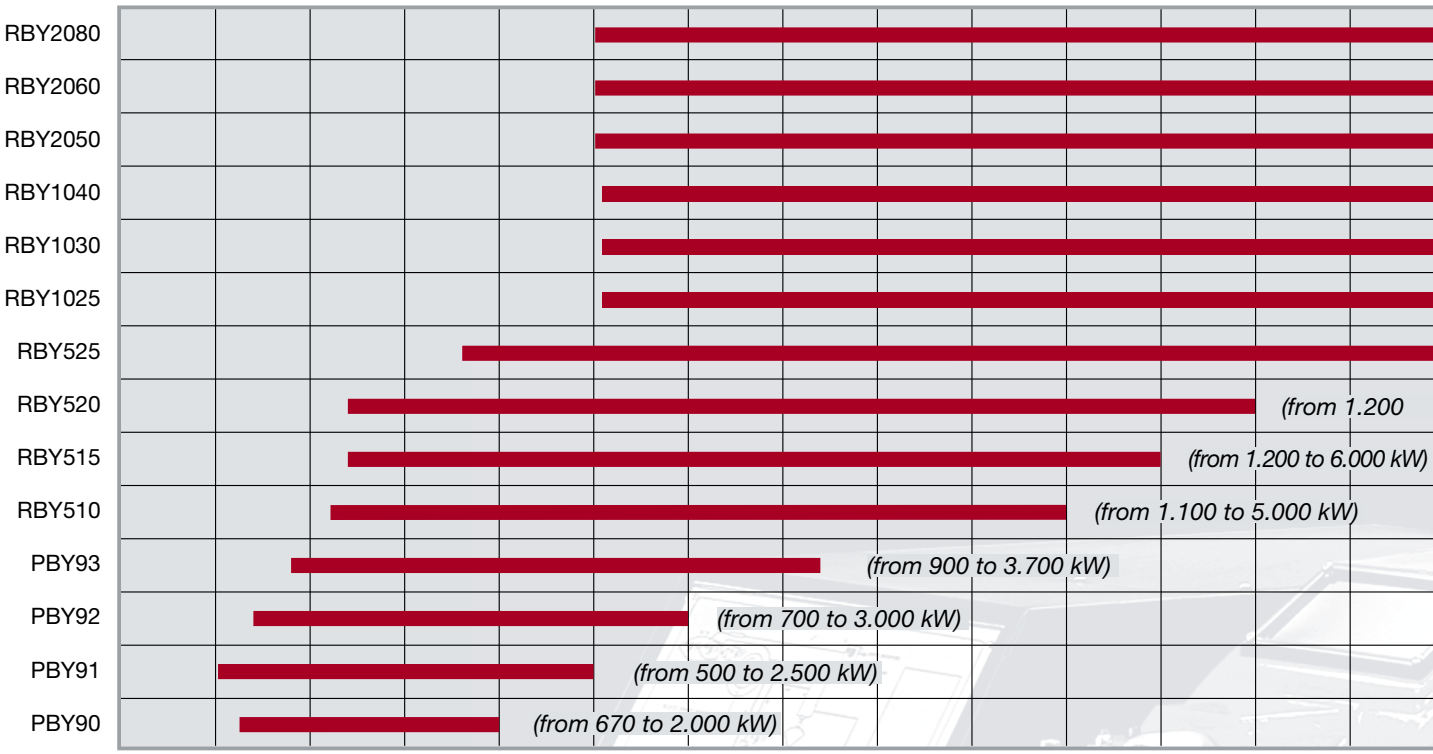
mechanical atomization
mille series

RN1030 - PR/MD
RN1040 - PR/MD

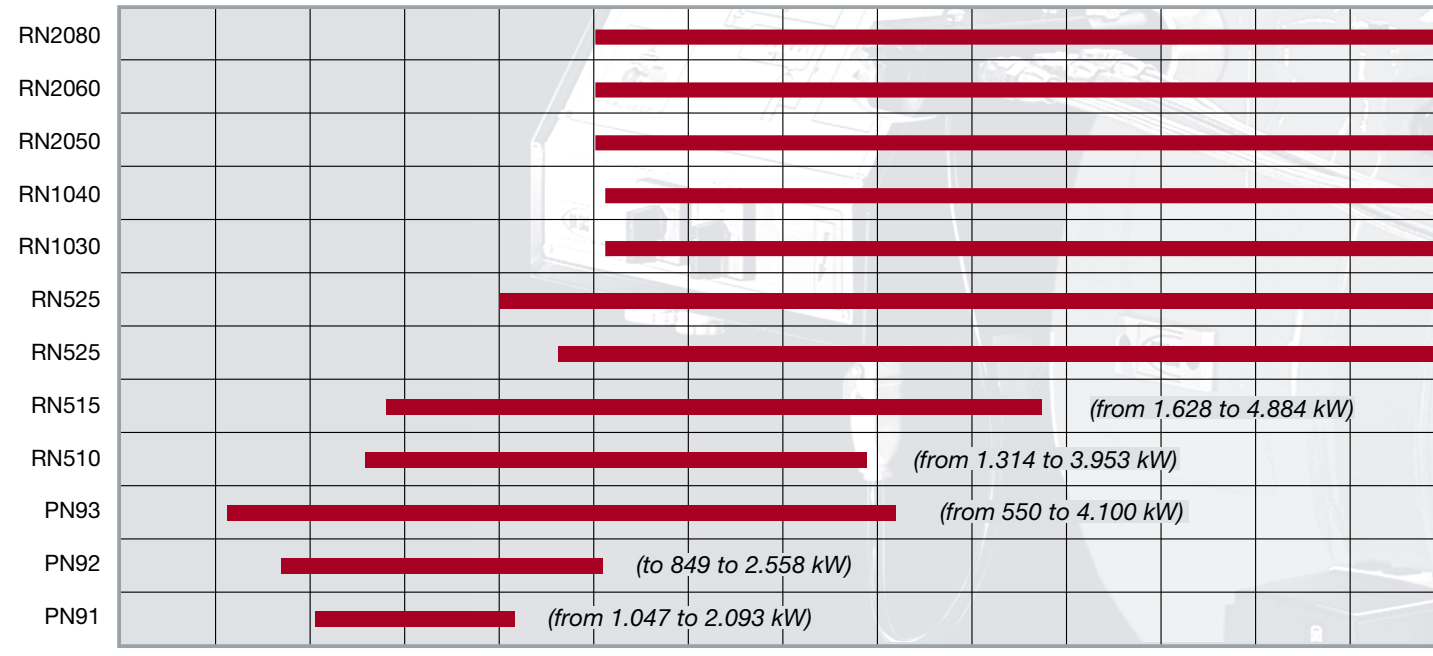
mechanical atomization
duemila series

RN2050 - PR/MD
RN2060 - PR/MD
RN2080 - PR/MD

Type pneumatic atomization



Type mechanical atomization



pneumatic atomization
novanta series

PBY90 - PR/MD
PBY91 - PR/MD
PBY92 - PR/MD
PBY93 - PR/MD

pneumatic atomization
cinquecento series

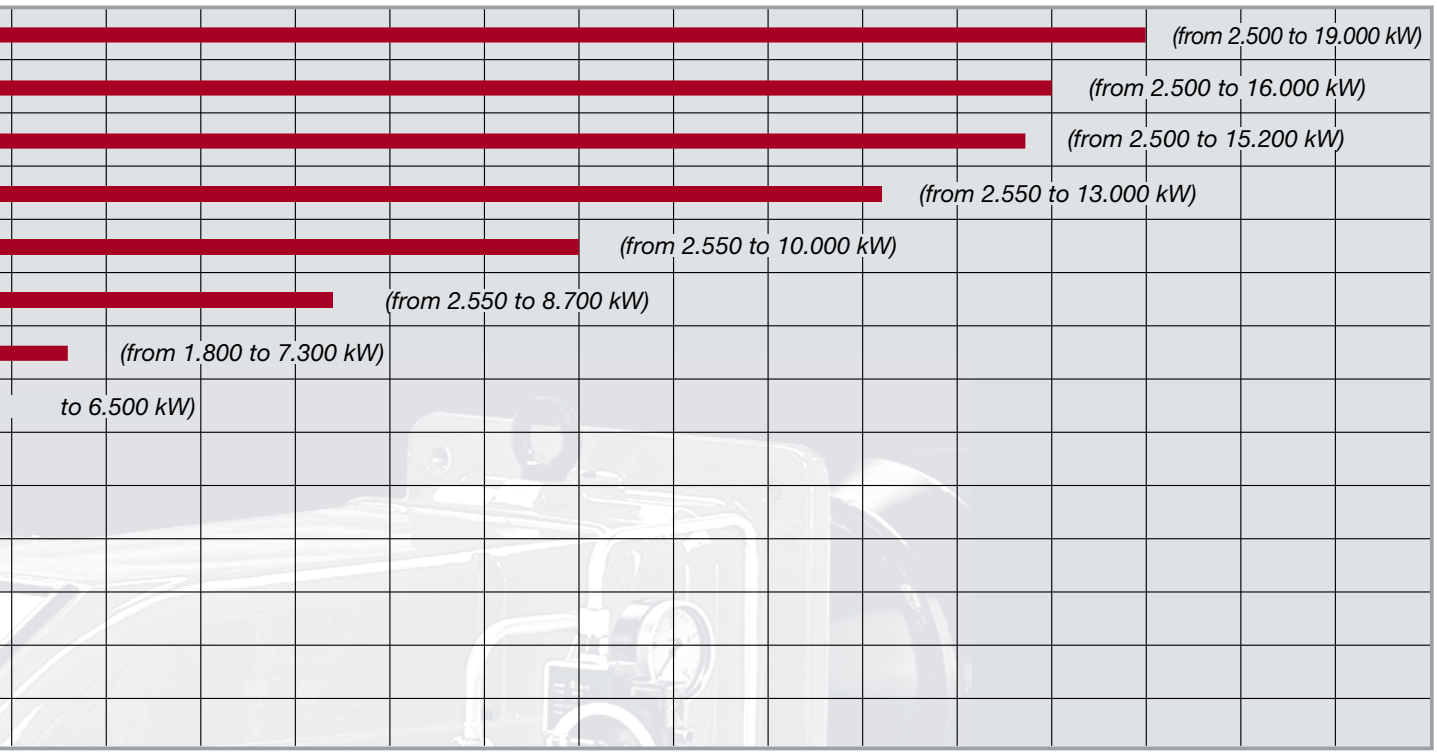
RBY510 - PR/MD
RBY515 - PR/MD
RBY520 - PR/MD
RBY525 - PR/MD

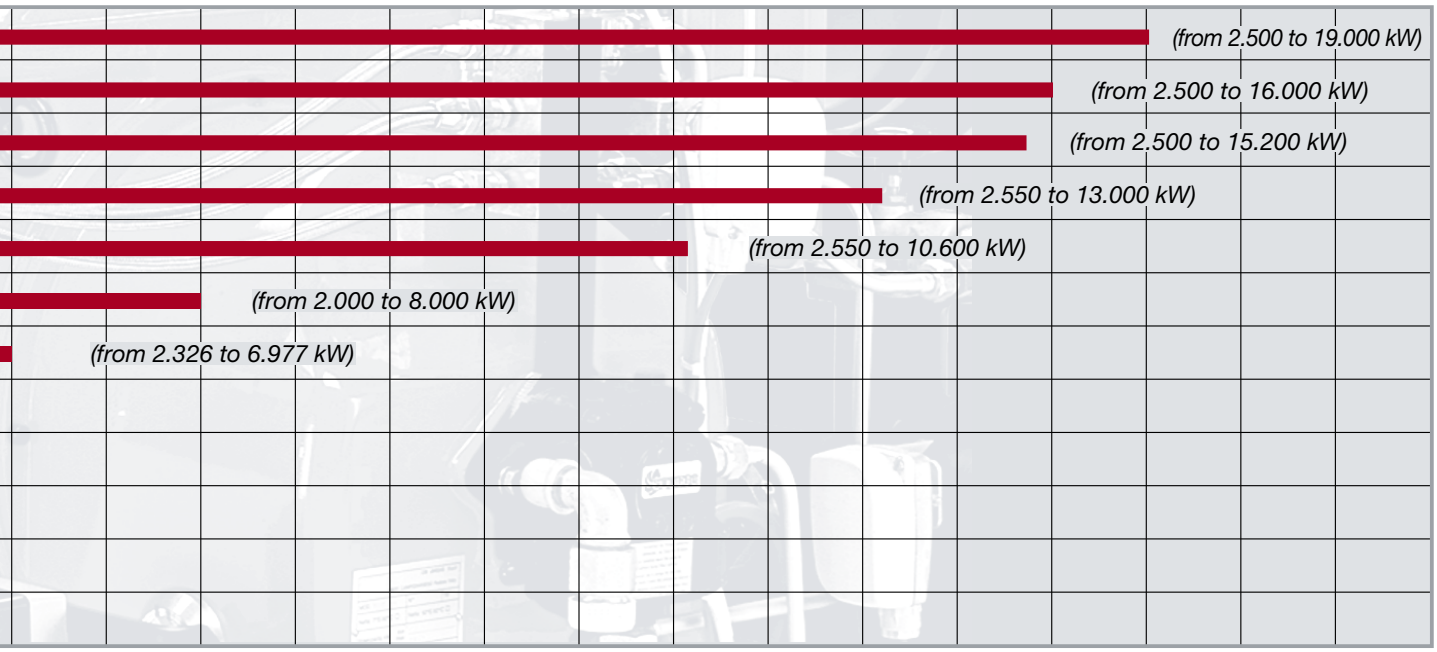
pneumatic atomization
mille series

RBY1025 - PR/MD
RBY1030 - PR/MD
RBY1040 - PR/MD

pneumatic atomization
duemila series

RBY2050 - PR/MD
RBY2060 - PR/MD
RBY2080 - PR/MD





OPTIONS LIGHT OIL BURNERS

VACUUM GAUGE

Model	Code	Price €
Glycerine vacuum gauge -1 ÷ 0 bar (¼" connection)	2520008	

FILTERS

Model	Code	Price €
Filter 1" 0,1 big	2090018	
Filter 1" 0,3 big	2090207	

MANOMETER

Model	Code	Price €
Glycerine gauge 0 ÷ 40 bar (¼" connection)	2520003	
Glycerine gauge 0 ÷ 6 bar (¼" connection)	2520006	
Glycerine gauge 0 ÷ 10 bar (¼" connection)	2520015	
Glycerine gauge 0 ÷ 16 bar (¼" connection)	2520014	
Glycerine gauge 0 ÷ 25 bar (¼" connection)	2520027	

SUPPORT FOR PRESSURE GAUGE manometer/vacuum gauge

Model	Gas connections	Code	Price €
Isolating valve (¼" connection)	¼"	2520005	

PRESSURE REGULATORS FOR LIGHT/HEAVY OIL RINGS

LIGHT OIL PRESSURE REGULATOR GROUPS

Type	Capacity kg/h	Diameter	Price €
GRP-G2	350	¾"	
GRP-G4	650	¾"	
GRP-G7	1.000	1"	
GRP-G10	1.600	1"	
GRP-G13	2.000	1"½	
GRP-G20	3.000	1"1/2	

Pressure regulator group supplied pre-assembled (no frame).
Packaging included.
For greater flow rates, quotations upon request.

LOW PRESSURE OIL HANDLING UNIT (RING) - LIGHT OIL - 2 PUMPS IN PARALLEL (ONE AS BACK-UP)

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-G2	350	2.300	1”	1.200 x 900 x 500	
GS-G4	650	4.300	1”1/2	1.300 x 900 x 600	
GS-G7	1.000	6.600	1”1/2	1.400 x 1.200 x 600	
GS-G10	1.600	10.600	DN 50	1.500 x 1.200 x 700	
GS-G13	2.000	13.300	DN 50	1.600 x 1.400 x 700	
GS-G20	3.000	20.000	DN 50	1.800 x 1.400 x 800	

LOW PRESSURE OIL HANDLING UNIT (RING) - LIGHT OIL - SINGLE PUMP

Type	Capacity kg/h	Power kW	Diameter	Dimensions a x b x h (mm)	Price €
GS-G2s	350	2.300	1”	1.200 x 600 x 500	
GS-G4s	650	4.300	1”1/2	1.300 x 600 x 600	
GS-G7s	1.000	6.600	1”1/2	1.400 x 800 x 600	
GS-G10s	1.600	10.600	DN 50	1.500 x 800 x 700	

The output is referred to the burners which can be supplied by the low pressure ring.
The flow rate is referred to the light oil flow rate pumped into the ring.
Dimensions are indicative.
Dimensions do not include the electrical panel, the panel can be installed on the the oil ring, or wall-hung (dimensions 400x250x600h mm).
For greater flow rates quotations upon request.
In order to pick up the correct oil ring to your application, refer to the output and choose the ring one size larger. Couple the ring with the regulation group of the same size. To finish the job remember to choose the the degassing tanks (the use of degassing tanks is mandatory when 2 or more burners are supplied by the same ring, only recomended in all other cases).