CIB UNIGAS

Let's light up tomorrow

GAS Low NO_x BURNERS
NOVANTA CINQUECENTO MILLE DUEMILA SERIES

无锡卡尔机电设备有限公司
电话：0510-83776624
网址：www.cncarl.com

ECOLOGIC

NO_x emissions < 30 mg/kWh
with FGR

CIB UNIGAS

Let's light up tomorrow

Protecting the environment is one of the most important values that CIB Unigas strives for as an internationally recognised company.
CIB Unigas burners are manufactured taking the environment into account in order to ensure low pollutant emissions.
When our high efficiency burners are matched to state of the art combustion chambers they achieve exceptional performance, this reflects CIB Unigas position as a worldwide leader in the heating field.

GENERAL FEATURES

- New soundproofing **NRS** (Noise Reduction System)
- Low NO_x firing head (class 3 ecologic) **LSR**
- New fan ventilator system **HVE** (High Ventilation Efficiency)
- New electrical panel

ECOLOGIC

www.cibunigas.it

The new website of CIB Unigas is a world of full information which are available in your own language. After the registration to our website, you can access in your personal area, whenever you want, using PC, smart phone or tablet. You will find out our closest office and a staff that is more than happy to assist you. Furthermore, you can download all the technical up-to-date documentation you need.
In CIB Unigas you can find not only burners for domestic and industrial applications, but also experienced and professional technicians and skilled managers who are always at your disposal and who find customized solutions to meet your requirements. CIB Unigas guarantees its products and provides you with a number of service centers all around the world.

Choose your language

Find the nearest dealer

Log-in to access your personal area

Download manuals and technical documentation

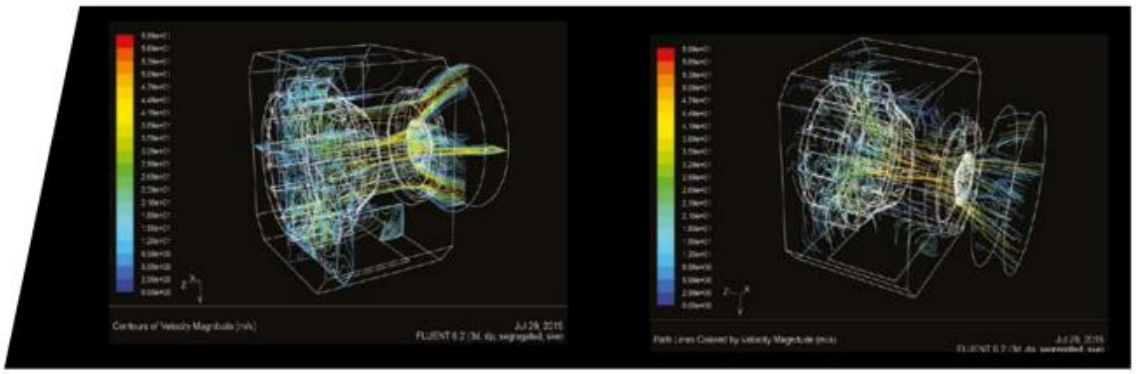
SOUNDPROOFING

nRS
noisereductionsystem

New air intake with **FGR** system

VENTILATION

Thanks to our continuous research and development in the field of ventilation, all our ventilators feature the **HVE** system (High Ventilation Efficiency) which allows better performance and significant energy savings.



ELECTRICAL PANEL

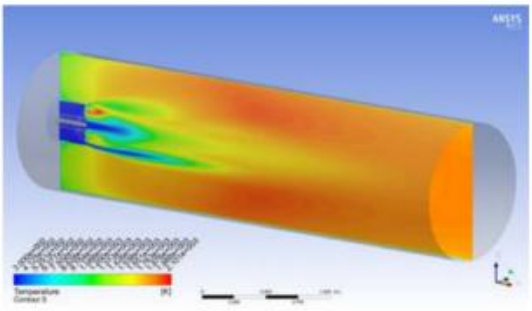
The introduction of the new electrical panel has optimized all the internal spaces in a rational way, granting an easier access to the components. The highly innovative front panel, displays the burner functions in a clear and visible way.

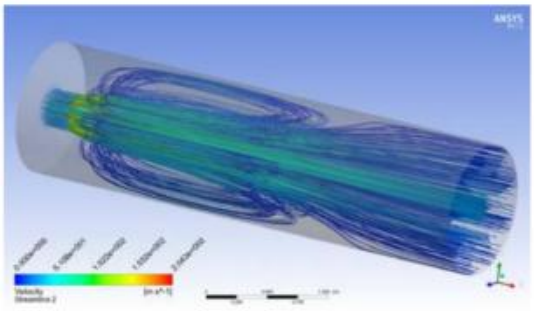
LOW NO_x GAS BURNERS

Class 3 Low NO_x burners feature the innovative combustion head **LSR** (Low Speed Recirculation) through which the gas fuel is burned in stages and a low pressure area is created.
This allows part of the flue gases to recirculate internally.

A SYNERGIC APPROACH TO NO_x REDUCTION

The interaction between combustion head, blast tube and combustion chamber allows for the creation of an internal flue gas recirculation area.
But as this imagine shows, if the combustion chamber is too narrow, this effect may be frustrated.





ELECTRONIC CONFIGURATION

New integrated electronic system with the possibility to connect the frequency inverter, moving combustion head and remote communications.

Air damper servomotor

Control unit and display

Gas butterfly valve servomotor

FGR butterfly valve servomotor

BURNER IDENTIFICATION

Type:

TYPE
RX... NOVANTA, CINQUECENTO, MILLE, DUEMILA SERIES

Model: M- . PR . S . IT . A . 1 . 50 . EA . EF

FUEL

M - NATURAL GAS
L - LPG
B - BIOGAS
C - TOWN GAS

OPERATION

PR - PROGRESSIVE
MD - FULLY MODULATING

BLAST TUBE

S - STANDARD

DESTINATION COUNTRY

IT ITALY
... AVAILABLE FOR OTHER COUNTRIES UPON REQUEST

BURNER MANUFACTURE

A STANDARD

EQUIPMENT

1 TWO GAS VALVES AND LEAKAGE CONTROL
7 TWO GAS VALVES AND GAS PRESSURE SWITCH (MAX)
8 TWO GAS VALVES, GAS PRESSURE SWITCH (MAX) AND LEAKAGE CONTROL

GAS CONNECTION

50	2"	100	DN125
65	DN65	DN100	150
80	DN80	125	DN150

ELECTRONIC VERSION

EF Medium-large burners complete with electronic cam and temperature-compensated flue gas recirculation, without O_2 monitoring, without inverter.

EG Medium-large burners complete with electronic cam, inverter and temperature-compensated flue gas recirculation, without O_2 monitoring

ER Medium-large burners complete with electronic cam, inverter and temperature-compensated flue gas recirculation, with O_2 monitornig

Low NO_x

EF with FGR <30 mg/kWh

LOW NO_x GAS BURNERS

BOILER EFFECT ON NO_x CONTENT IN THE SMOKES

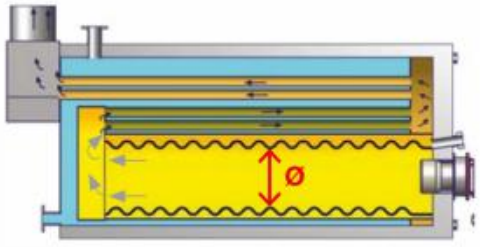
THE SAME BURNER, AT THE SAME LOAD, IN DIFFERENT FURNACES, PRODUCES DIFFERENT NO_x EMISSION VALUES. WHY?

As is known that the furnace dimension affects the shape of the flame and the CO emissions, it is also clear that it influences the NO_x values in the fumes.
In order to achieve the best performace in terms of emissions, the burner and the combustion chamber must be evaluated together as a single thermal unit.
The right burner-boiler matching is a key factor to obtain the required emission values.

BOILER TYPE: reverse flame or 3 smoke-pass affects:

↓

- the permanence time of the reagents inside the furnace
- the furnace temperature
- the recirculation area shape.



COMBUSTION CHAMBER THERMAL LOAD

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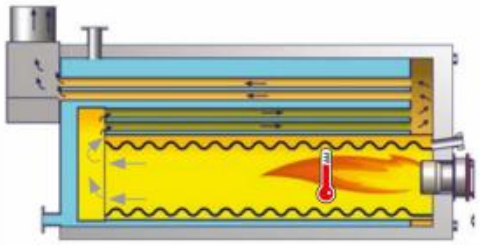
affects: the flame temperature



BOILER MEDIUM TEMPERATURE

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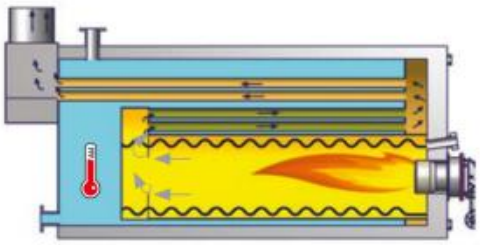
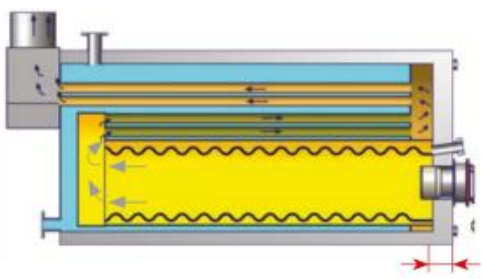
affects: the flame temperature



FRONT WALL THICKNESS/BURNER BLAST TUBE

↓

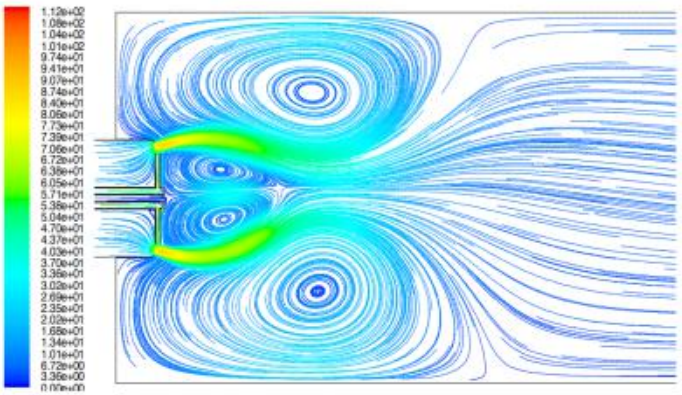
affects: the gases recirculation



Reverse flame boilers: please contact our Technical Dept

The inert flue gas cools the flame, reduces the partial pressure of oxygen, and lowers nitrogen oxide emissions.

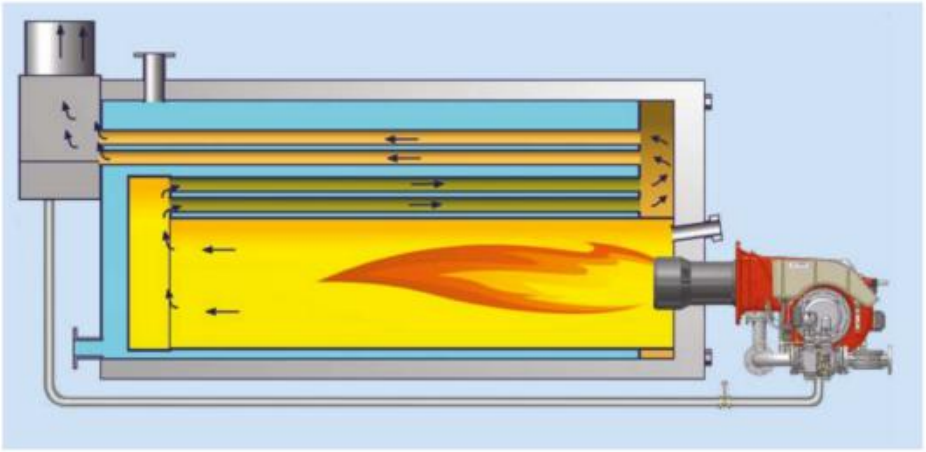
TWO TECHNOLOGY: TOGETHER TO REACH NOx EMISSIONS LESS THAN 30 mg/kWh



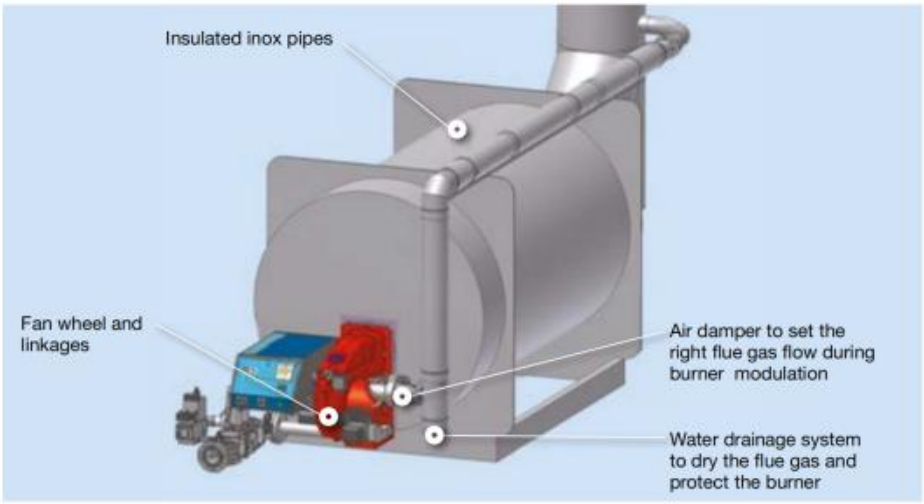
Internal furnace flue gas recirculation:
The smokes recirculates inside the combustion chamber thanks to the effect created by the blast tube/combustion head shape.
From the picture it is evident how a furnace too narrow can hinder this effect.

EXTERNAL FLUE GAS RECIRCULATION

Flue gases may be drawn from a furnace (usually downstream of the convection section) and tunneled into the burners. This may require an induced-draught fan to pull flue gases out an exit duct and back into to the burner.



FLUE GAS RECIRCULATION
MONOBLOCK SERIES

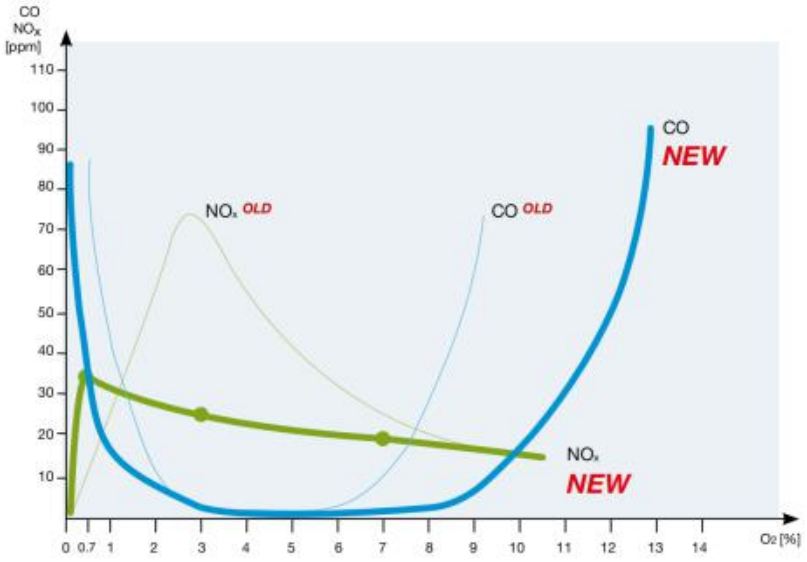


FLUE GAS RECIRCULATION PLANT

CIB UNIGAS RESULTS

NO_x VERSUS CO

Usually the right O_2 quantity ensures proper combustion, high combustion efficiency and better emission values.
Until now we were forced to accept a compromise: reduce NO_x emissions increasing carbon monoxide (CO) in the flue gases (see the diagram on the right).

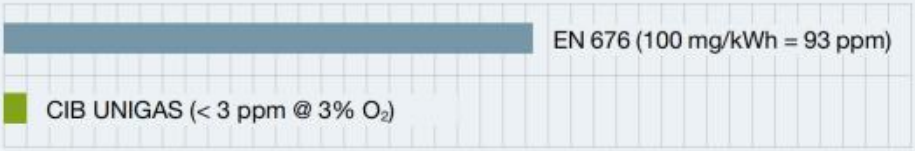


THE ECOLOGIC BURNER SERIES HAS REACHED A GREAT GOAL: WIDE RANGE OF COMBUSTION FLEXIBILITY!

The new array of burners "Ecologic" is a revolution in terms of NO_x and CO contents in situations in which the range of O_2 varies.
The new CIB Unigas low NO_x burners, ensure that smokes are free from CO for O_2 variations ranging from 0.5% and 8%, maintaining the NO_x emissions almost unchanged.
The advantage is clear: the proper boiler choice could allow to set O_2 = 1.5% without CO production, keeping the NO_x emissions unchanged and increasing the combustion efficiency.
Clear and cheap!

ECOLOGIC

CO EMISSIONS



NO_x EMISSIONS ON 3 SMOKE PASS BOILERS

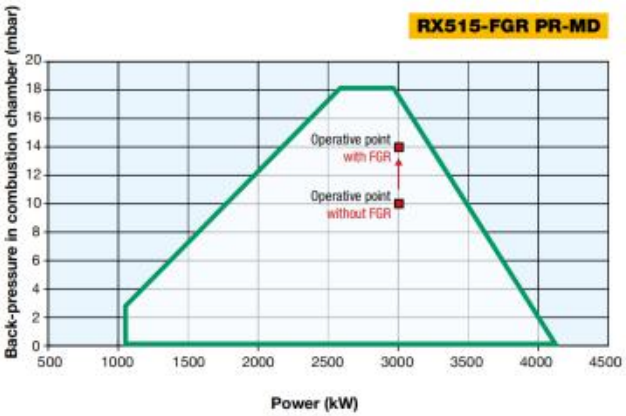
Reverse flame boilers: please contact our Technical Dept

CIB UNIGAS RECOMMENDATION FOR BOILER MATCHING

EXAMPLE

Boiler data sheet:
Boiler input= 3000 kW
Back pressure = 10 mbar
When using FGR the back pressure in the combustion chamber increases by 45%.

Correct burner selection:
Burner output = 3000 kW
Back pressure = 14 mbar
Burner model: RX515-FGR

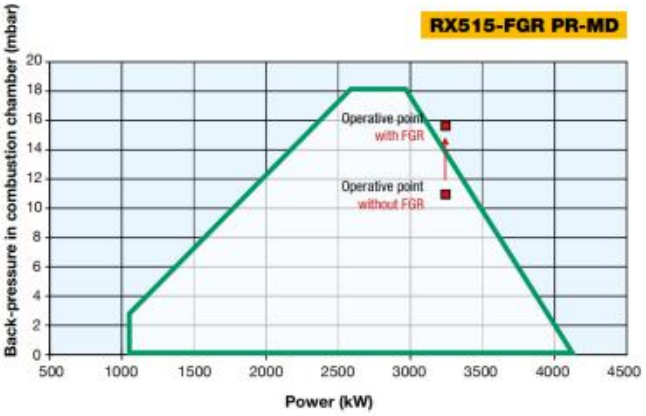


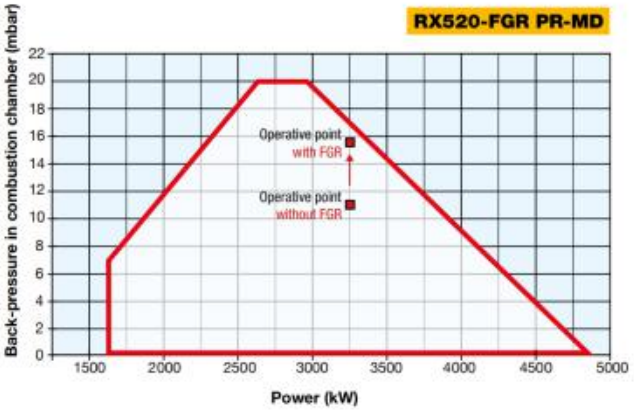
EXAMPLE

Boiler data sheet:
Boiler input= 3250 kW
Back pressure = 11 mbar
When using FGR the back pressure in the combustion chamber increases by 45%.

Correct burner selection:
Burner output = 3250 kW
Back pressure = 15,9 mbar

In this case, as it is shown in the picture, the model RX515-FGR is not the correct one. **Thus, we must select the model RX520-FGR**.



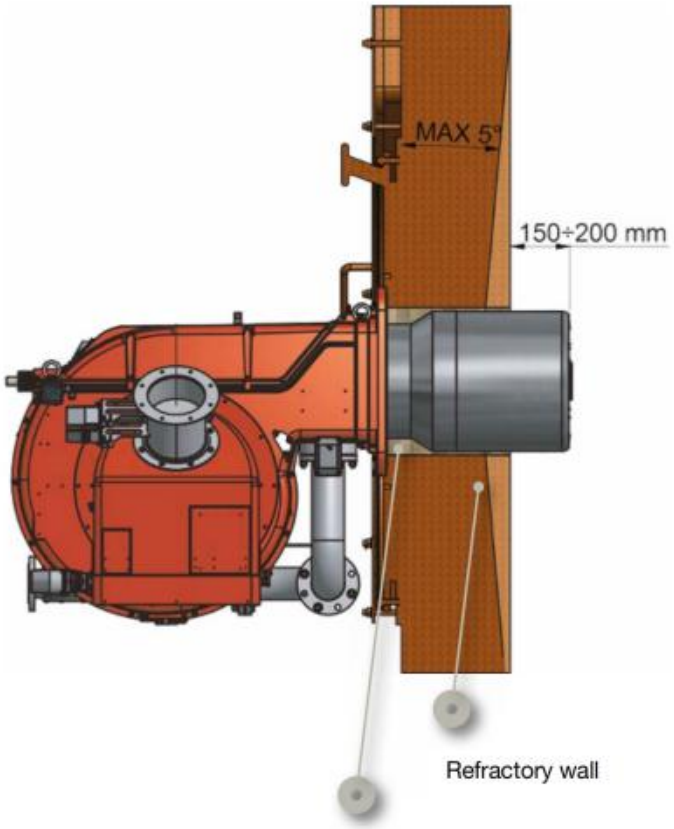


REFERENCE CONDITIONS:

- Tolerance of measurement as per EN 676
- Temperature: 20 °C
- Dry smokes
- Ambient pressure: 1013 mbar
- Relative humidity: 70% (10 g H_2O/kg air)
- Boiler medium temperature: 110 °C
- Fuel: natural gas (ref. G20)
- 3 smoke pass boilers

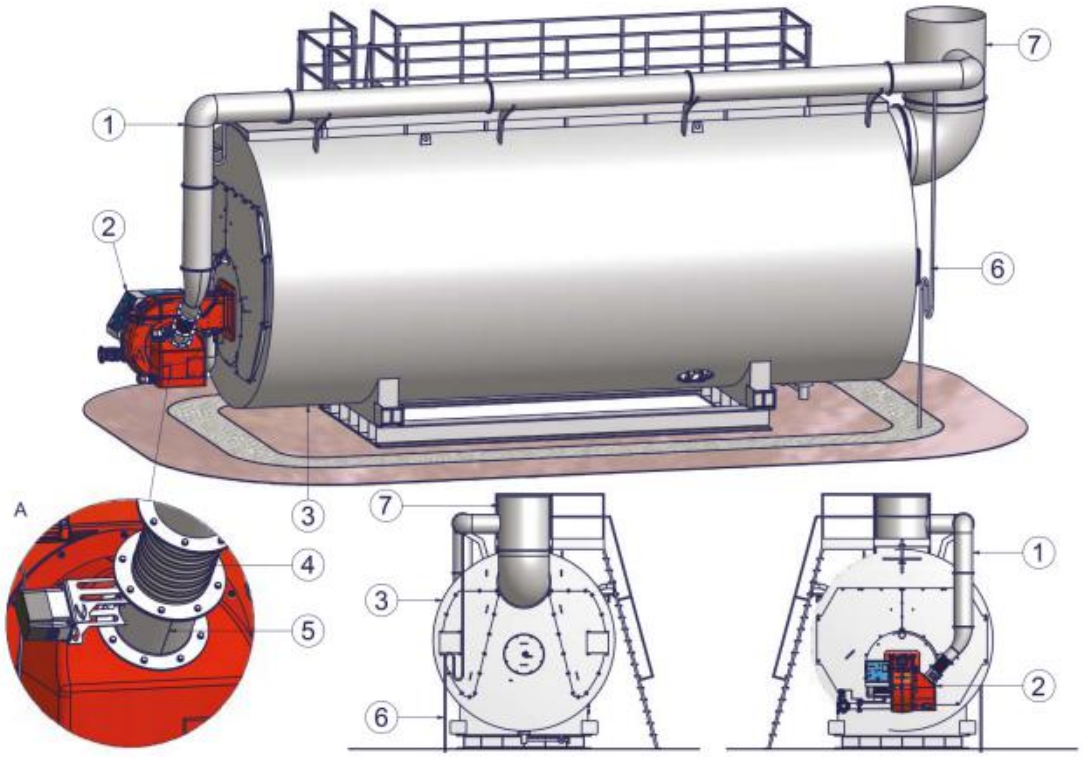
FURNACE SIZING AND BURNER INSTALLATION:

Blast tube must be protube 150 -200 mm inside the furnace
Furnace internal wall must be as flat as possible.
The gap between the front wall hole and blast tube must be well sealed with ceramic fibre carrefully.



Reverse flame boilers: please contact our Technical Dept

FLUE GAS RECIRCULATION



KEY

1 - Flue gas pipe
2 - Burner
3 - Boiler
4 - Antivibrating joint
5 - Smoke butterfly valve
6 - Smoke probe
7 - Boiler chimney

LOW NO_x PRODUCTION RANGE

novanta series

RX92R-FGR - PR/MD
RX92-FGR - PR/MD

cinquecento series

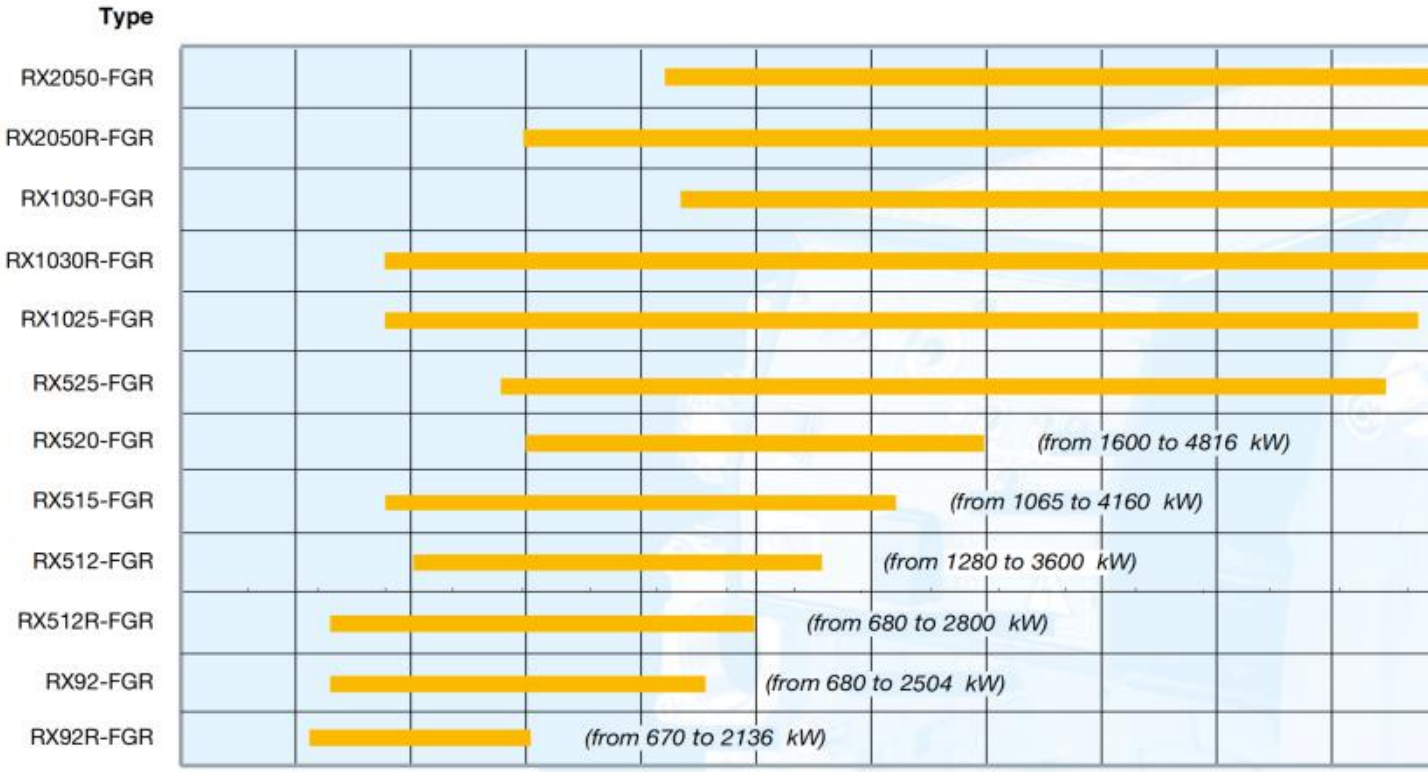
RX512R-FGR - PR/MD
RX512-FGR - PR/MD
RX515-FGR - PR/MD
RX520-FGR - PR/MD
RX525-FGR - PR/MD

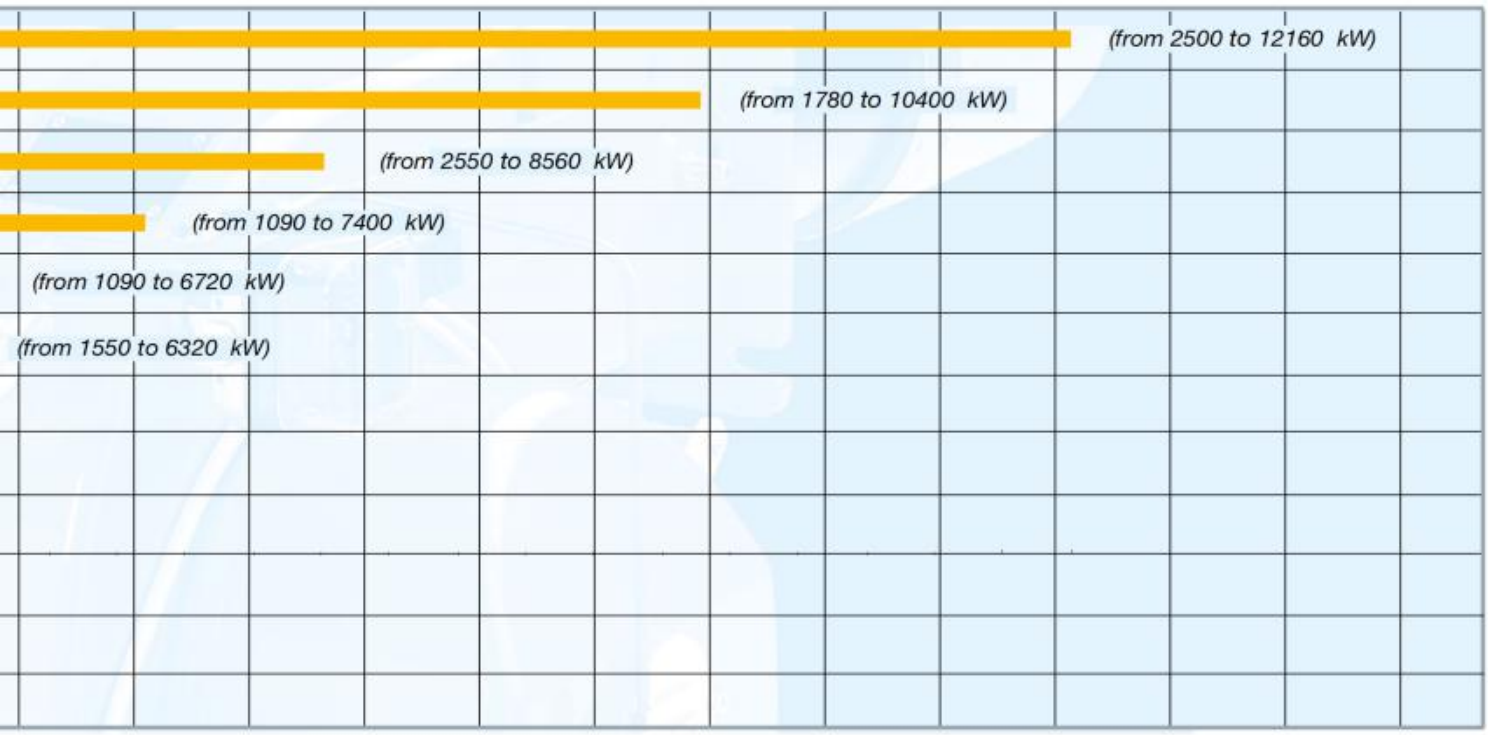
mille series

RX1025-FGR - PR/MD
RX1030R-FGR - PR/MD
RX1030-FGR - PR/MD

duemila series

RX2050R-FGR - PR/MD
RX2050-FGR - PR/MD



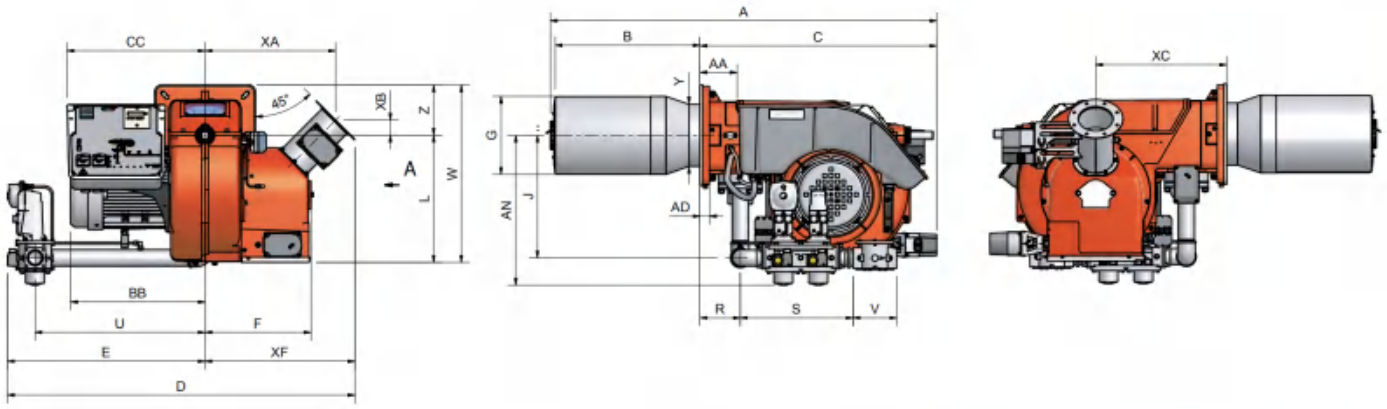

(from 2500 to 12160 kW)
(from 1780 to 10400 kW)
(from 2550 to 8560 kW)
(from 1090 to 7400 kW)
(from 1090 to 6720 kW)
(from 1550 to 6320 kW)

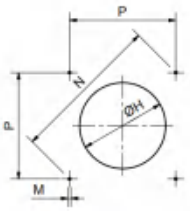
RX92R-FGR RX92-FGR

TECHNICAL SPECIFICATIONS

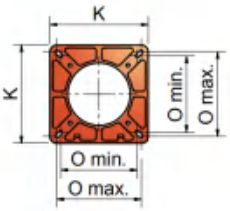
Type	Model	Power kW		Electric power	Fan motor	Gas connections	Noise level
		min.	max.	supply	kW	Rp	dBA
RX92R-FGR	M-.xx.x.xx.A.1.xxx	670	2136	230/400 V 3N ac	7,5	2" - DN65 - DN80 - DN100	< 80
RX92-FGR	M-.xx.x.xx.A.1.xxx	680	2504	230/400 V 3N ac	7,5	2" - DN65 - DN80 - DN100	< 80

The FGR burners are equipped with antivibrating joint (lenght 300 mm) to be assembled at FGR connection and FGR flange to be welded to the FGR pipe.

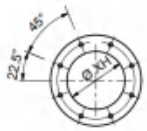




Recommended drilling template



Burner flange



FGR flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
RX92R-FGR	1680	1080	1080	260
RX92-FGR	1680	1080	1080	270

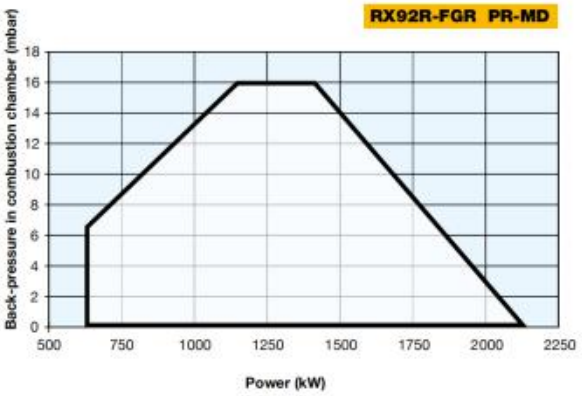
Approximate values

Type	Overall dimensions (mm)				
	XA	XB	XC	XF	XH
RX92R-FGR	479	56	481	550	128
RX92-FGR	479	56	481	550	128

Type	Model	Overall dimensions (mm)																											
		AA	A	AD	AN	BB	B	C	CC	D	E	F	G	H	J	K	L	M	N	O		P	Q	R	S	U	V	W	Y	Z
																				min.	max.									
RX92R-FGR	M-.xx.x.xx.A.1.50	135	1395	35	550	441	490	1005	507	1275	765	390	260	290	447	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
RX92R-FGR	M-.xx.x.xx.A.1.65	135	1395	35	564	441	490	1005	507	1521	971	390	260	290	447	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
RX92R-FGR	M-.xx.x.xx.A.1.80	135	1395	35	579	441	490	1005	507	1552	1002	390	260	290	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
RX92R-FGR	M-.xx.x.xx.A.1.100	135	1395	35	592	441	490	1005	507	1635	1085	390	260	290	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185
RX92-FGR	M-.xx.x.xx.A.1.50	135	1535	35	550	493	530	1005	507	1275	725	390	285	315	447	360	464	M12	424	280	310	300	532	148	384	624	190	649	228	185
RX92-FGR	M-.xx.x.xx.A.1.65	135	1535	35	564	493	530	1005	507	1521	971	390	285	315	442	360	464	M12	424	280	310	300	632	148	484	846	292	649	228	185
RX92-FGR	M-.xx.x.xx.A.1.80	135	1535	35	579	493	530	1005	507	1552	1002	390	285	315	447	360	464	M12	424	280	310	300	683	148	535	875	313	649	228	185
RX92-FGR	M-.xx.x.xx.A.1.100	135	1535	35	592	493	530	1005	507	1635	1859	390	285	315	447	360	464	M12	424	280	310	300	790	148	642	942	353	649	228	185

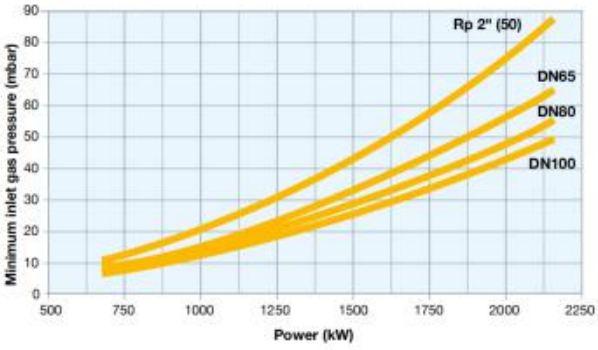
Approximate values

RX92R-FGR PR-MD

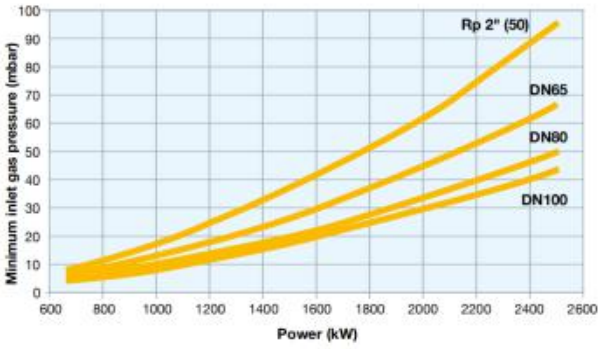


RX92-FGR PR-MD

RX92R-FGR PR-MD

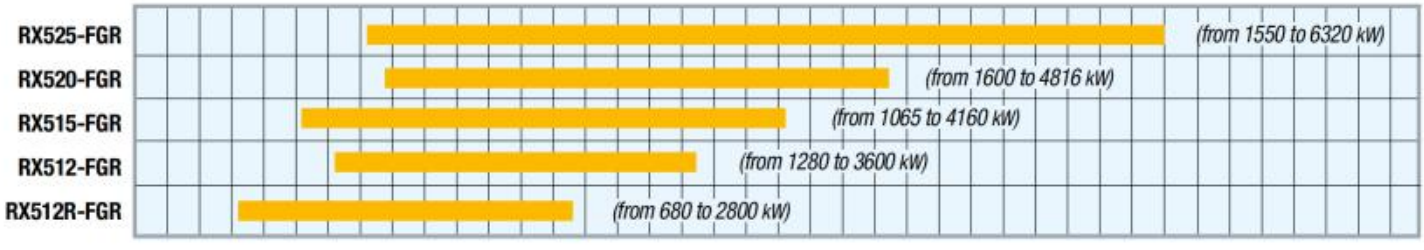


RX92-FGR PR-MD



RX512R-FGR RX512-FGR RX515-FGR RX520-FGR RX525-FGR

cinquecento SERIES



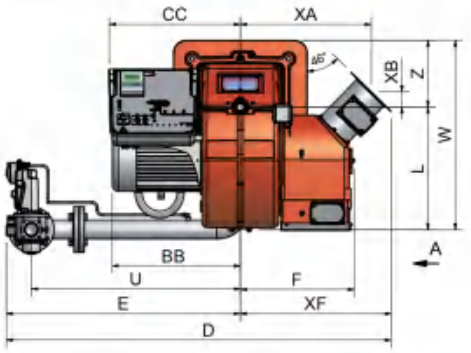
RX512R-FGR RX512-FGR RX515-FGR RX520-FGR RX525-FGR

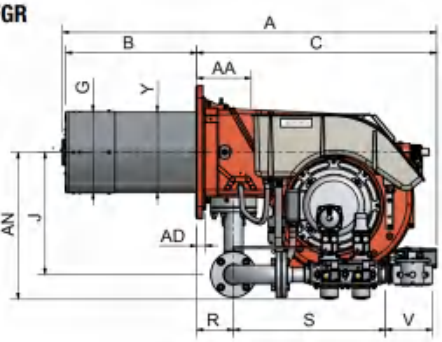
TECHNICAL SPECIFICATIONS

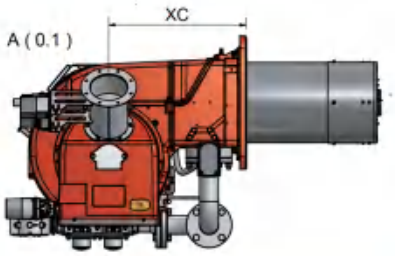
Type	Model	Power kW min.	Power kW max.	Electric power supply	Fan motor kW	Gas connections Rp	Noise level dBA
RX512R-FGR	M-.xx.x.xx.A.1.xxx	680	2800	230/400 V 3N ac	11,0	2" - DN65 - DN80 - DN100	<90
RX512-FGR	M-.xx.x.xx.A.1.xxx	1280	3600	230/400 V 3N ac	11,0	2" - DN65 - DN80 - DN100	<90
RX515-FGR	M-.xx.x.xx.A.1.xxx	1065	4160	230/400 V 3N ac	15,0	2" - DN65 - DN80 - DN100	<90
RX520-FGR	M-.xx.x.xx.A.1.xxx	1600	4816	230/400 V 3N ac	15,0	2" - DN65 - DN80 - DN100	<90

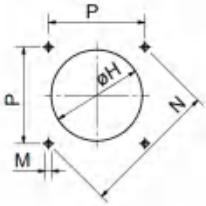
The FGR burners are equipped with antivibrating joint (lenght 300 mm) to be assembled at FGR connection and FGR flange to be welded to the FGR pipe.

RX512R-FGR - RX512-FGR - RX515-FGR - RX520-FGR

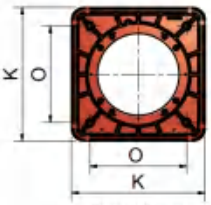








Recommended drilling template



Burner flange

FGR flange

Type	Packaging dimensions (mm) l	p	h	kg
RX512R-FGR	1890	1460	1120	340
RX512-FGR	1890	1460	1120	350
RX515-FGR	1890	1460	1120	390
RX520-FGR	1890	1460	1120	400

Approximate values

Type	Overall dimensions (mm) XA	XB	XC	XF	XH
RX512R-FGR	529	63	554	610	151
RX512-FGR	529	63	554	610	151
RX515-FGR	529	63	554	610	151
RX520-FGR	529	63	554	610	151

Type	Model	Overall dimensions (mm) AA	A	AD	AN	BB	B	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	U	V	W	Y	Z
RX512R-FGR	M-.xx.x.xx.A.1.50	220	1683	35	595	517	530	1153	534	1590	946	644	310	350	494	540	494	M14	552	390	390	763	149	614	845	190	764	310	270
RX512R-FGR	M-.xx.x.xx.A.1.65	220	1683	35	611	517	530	1153	534	1613	969	644	310	350	494	540	494	M14	552	390	390	636	149	487	845	292	764	310	270
RX512R-FGR	M-.xx.x.xx.A.1.80	220	1683	35	626	517	530	1153	534	1645	1002	644	310	350	494	540	494	M14	552	390	390	687	149	538	875	313	764	310	270
RX512R-FGR	M-.xx.x.xx.A.1.100	220	1683	35	595	517	530	1153	534	1726	1082	644	310	350	494	540	494	M14	552	390	390	791	149	642	942	353	764	310	270
RX512-FGR	M-.xx.x.xx.A.1.50	220	1683	35	595	517	530	1153	534	1590	946	644	330	370	494	540	494	M14	552	390	390	763	149	614	845	190	764	330	270
RX512-FGR	M-.xx.x.xx.A.1.65	220	1683	35	611	517	530	1153	534	1613	969	644	330	370	494	540	494	M14	552	390	390	636	149	487	845	292	764	330	270
RX512-FGR	M-.xx.x.xx.A.1.80	220	1683	35	626	517	530	1153	534	1645	1002	644	330	370	494	540	494	M14	552	390	390	687	149	538	875	313	764	330	270
RX512-FGR	M-.xx.x.xx.A.1.100	220	1683	35	595	517	530	1153	534	1726	1082	644	330	370	494	540	494	M14	552	390	390	791	149	642	942	353	764	330	270
RX515-FGR	M-.xx.x.xx.A.1.50	220	1683	35	595	517	530	1153	534	1590	946	644	360	400	494	540	494	M14	552	390	390	763	149	614	845	190	764	360	270
RX515-FGR	M-.xx.x.xx.A.1.65	220	1683	35	611	517	530	1153	534	1613	969	644	360	400	494	540	494	M14	552	390	390	636	149	487	845	292	764	360	270
RX515-FGR	M-.xx.x.xx.A.1.80	220	1683	35	626	517	530	1153	534	1645	1002	644	360	400	494	540	494	M14	552	390	390	687	149	538	875	313	764	360	270
RX515-FGR	M-.xx.x.xx.A.1.100	220	1683	35	639	517	530	1153	534	1726	1082	644	360	400	494	540	494	M14	552	390	390	791	149	642	942	353	764	360	270
RX520-FGR	M-.xx.x.xx.A.1.50	220	1683	35	595	517	530	1153	534	1590	946	644	385	425	494	540	494	M14	552	390	390	755	149	614	844	190	764	385	270
RX520-FGR	M-.xx.x.xx.A.1.65	220	1683	35	611	517	530	1153	534	1613	669	644	385	425	494	540	494	M14	552	390	390	636	149	487	845	292	764	385	270
RX520-FGR	M-.xx.x.xx.A.1.80	220	1683	35	626	517	530	1153	534	1645	1002	644	385	425	494	540	494	M14	552	390	390	687	149	538	875	313	764	385	270
RX520-FGR	M-.xx.x.xx.A.1.100	220	1683	35	639	517	530	1153	534	1726	1082	644	385	425	494	540	494	M14	552	390	390	791	149	642	942	353	764	385	270

Approximate values

RX512R-FGR RX512-FGR RX515-FGR RX520-FGR RX525-FGR

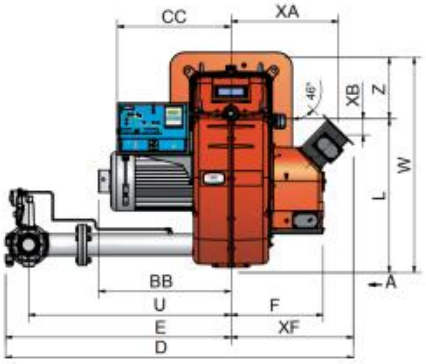
cinquecento SERIES

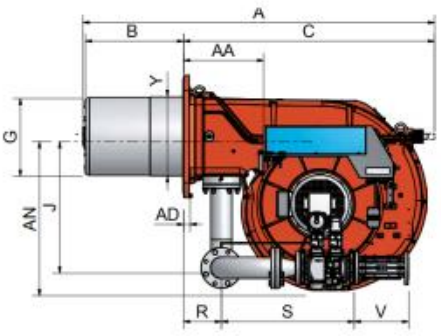
TECHNICAL SPECIFICATIONS

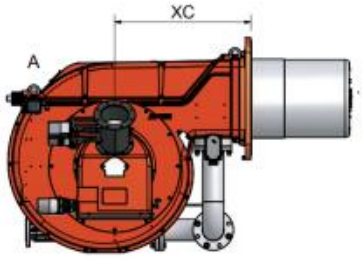
Type	Model	Power kW min.	Power kW max.supply	Electric power	Fan motor kW	Gas connections Rp	Noise level dBA
RX525-FGR	M-.xx.x.xx.A.1.xxx	1550	6320	230/400 V 3N ac	18,5	DN65 - DN80 - DN100	<90

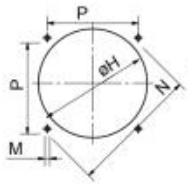
The FGR burners are equipped with antivibrating joint (lenght 300 mm) to be assembled at FGR connection and FGR flange to be welded to the FGR pipe.

RX525-FGR

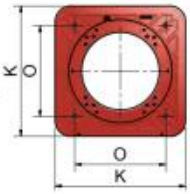








Recommended drilling template



Burner flange

FGR flange

Type	Packaging dimensions (mm) l	p	h	kg
RX525-FGR	2300	1720	1410	700

Approximate values

Type	Overall dimensions (mm) XA	XB	XC	XF	XH
RX525-FGR	579	87	735	560	151

Type	Model	Overall dimensions (mm) AA	A	AD	AN	BB	B	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	RR	S	U	V	W	Y	Z
RX525-FGR	M-.xx.x.xx.A.1.65	432	1883	35	827	664	530	1353	614	2121	1299	496	420	470	709	660	831	M16	651	460	460	914	200	265	714	1092	292	1146	420	330
RX525-FGR	M-.xx.x.xx.A.1.80	432	1883	35	841	664	530	1353	614	2123	1301	496	420	470	709	660	831	M16	651	460	460	936	200	265	736	1092	322	1146	420	330
RX525-FGR	M-.xx.x.xx.A.1.100	432	1883	35	854	664	530	1353	614	2139	1317	496	420	470	709	660	831	M16	651	460	460	842	200	265	642	1092	382	1146	420	330

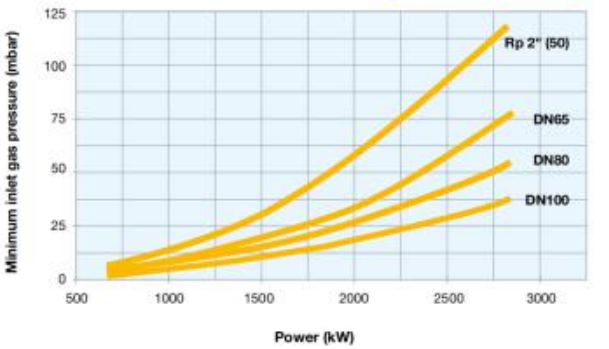
Approximate values

RX512R-FGR RX512-FGR RX515-FGR RX520-FGR RX525-FGR

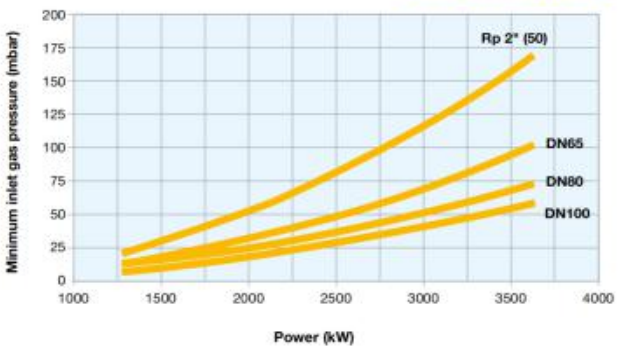
RX512R-FGR RX512-FGR RX515-FGR RX520-FGR RX525-FGR

cinquecento SERIES

RX512R-FGR PR-MD

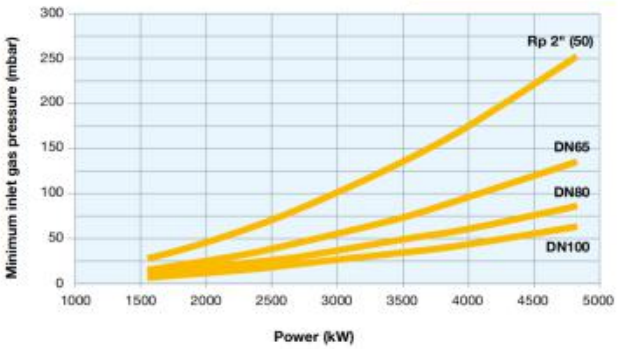


RX512-FGR PR-MD

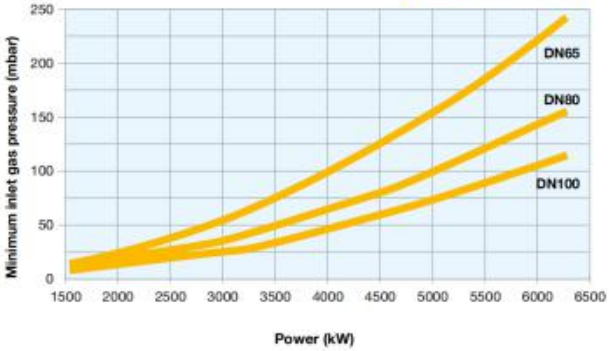


RX515-FGR PR-MD

RX520-FGR PR-MD



RX525-FGR PR-MD



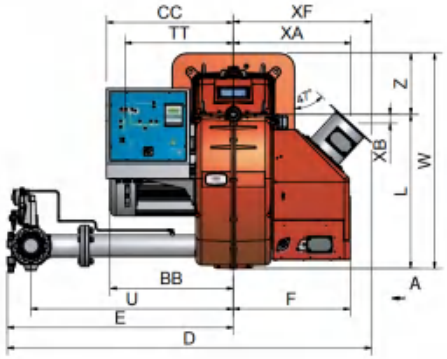
RX1025-FGR RX1030R-FGR RX1030-FGR

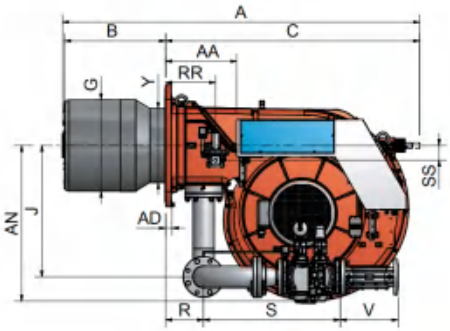
RX1025-FGR RX1030R-FGR RX1030-FGR mille SERIES

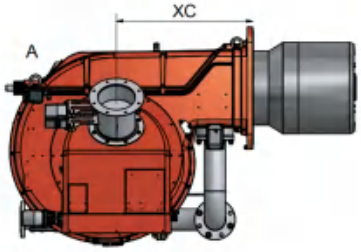
TECHNICAL SPECIFICATIONS

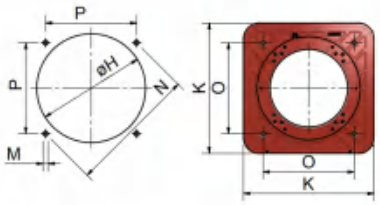
Type	Model	Power kW		Electric power	Fan motor	Gas connections	Noise level
		min.	max.	supply	kW	Rp	dBA
RX1025-FGR	M-.xx.x.xx.A.1.xxx	1090	6720	230/400 V 3N ac	18,5	DN65 - DN80 - DN100	<90
RX1030R-FGR	M-.xx.x.xx.A.1.xxx	1090	7400	230/400 V 3N ac	22,0	DN65 - DN80 - DN100	<90
RX1030-FGR	M-.xx.x.xx.A.1.xxx	2550	8560	230/400 V 3N ac	30,0	DN80 - DN100	<90

The FGR burners are equipped with antivibrating joint (lenght 300 mm) to be assembled at FGR connection and FGR flange to be welded to the FGR pipe.



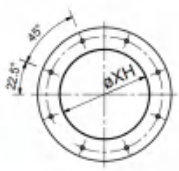






Recommended drilling template

Burner flange



FGR flange

Type	Packaging dimensions (mm)			
	l	p	h	kg
RX1025-FGR	2300	1720	1410	700
RX1030R-FGR	2300	1720	1410	700
RX1030-FGR	2300	1720	1410	700

Approximate values

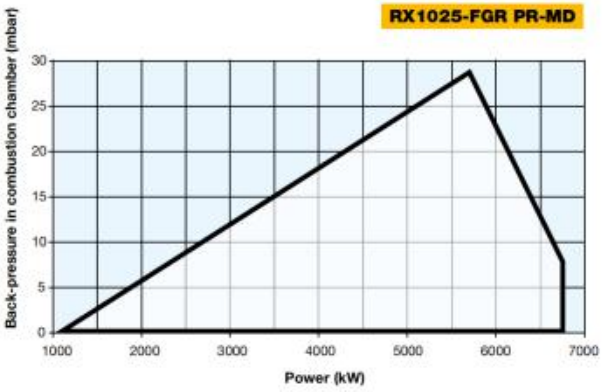
Type	Overall dimensions (mm)				
	XA	XB	XC	XF	XH
RX1025-FGR	634	48	735	744	201
RX1030R-FGR	634	48	735	744	201
RX1030-FGR	634	48	735	744	201

Type	Model	Overall dimensions (mm)																														
		AA	A	AD	AN	AP	BB	B	C	CC	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	RR	S	SS	U	V	W	Y	Z
RX1025-FGR	M-.xx.x.xx.A.1.65	377	1927	25	827	118	648	545	1370	684	2043	1299	822	448	498	709	660	831	M16	651	460	460	914	200	265	714	80	1092	292	1146	448	330
RX1025-FGR	M-.xx.x.xx.A.1.80	377	1927	25	841	132	648	545	1370	684	2045	1301	822	448	498	709	660	831	M16	651	460	460	936	200	265	736	80	1092	322	1146	448	330
RX1025-FGR	M-.xx.x.xx.A.1.100	377	1927	25	854	145	648	545	1370	684	2061	1317	822	448	498	709	660	831	M16	651	460	460	842	200	265	642	80	1092	382	1146	448	330
RX1030R-FGR	M-.xx.x.xx.A.1.65	377	1927	25	827	118	664	545	1370	684	2043	1299	822	448	498	709	660	831	M16	651	460	460	914	200	265	714	80	1092	292	1146	448	330
RX1030R-FGR	M-.xx.x.xx.A.1.80	377	1927	25	841	132	664	545	1370	684	2045	1301	822	448	498	709	660	831	M16	651	460	460	936	200	265	736	80	1092	322	1146	448	330
RX1030R-FGR	M-.xx.x.xx.A.1.100	377	1927	25	854	145	664	545	1370	684	2061	1317	822	448	498	709	660	831	M16	651	460	460	842	200	265	642	80	1092	382	1146	448	330
RX1030-FGR	M-.xx.x.xx.A.1.80	377	1927	25	841	132	664	545	1370	684	2045	1301	822	493	543	709	660	831	M16	651	460	460	936	200	265	736	80	1092	322	1146	493	330
RX1030-FGR	M-.xx.x.xx.A.1.100	377	1927	25	854	145	664	545	1370	684	2061	1317	822	493	543	709	660	831	M16	651	460	460	842	200	265	642	80	1092	382	1146	493	330

Approximate values

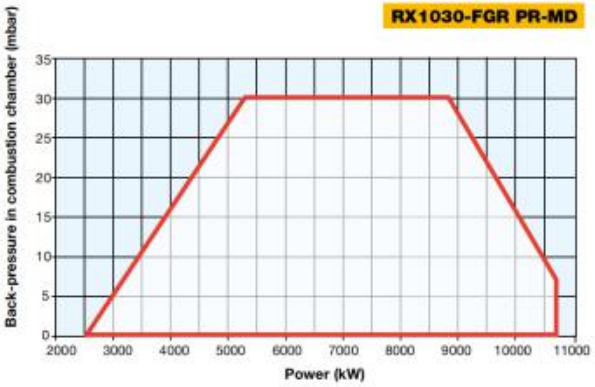
RX1025-FGR RX1030R-FGR RX1030-FGR

RX1025-FGR PR-MD

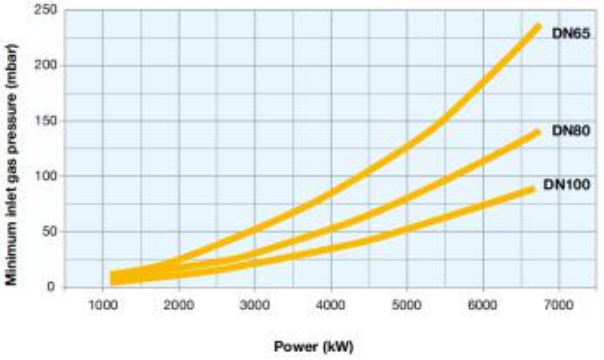


RX1030R-FGR PR-MD

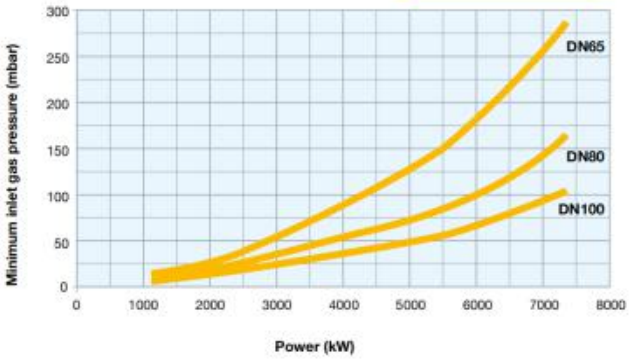
RX1030-FGR PR-MD



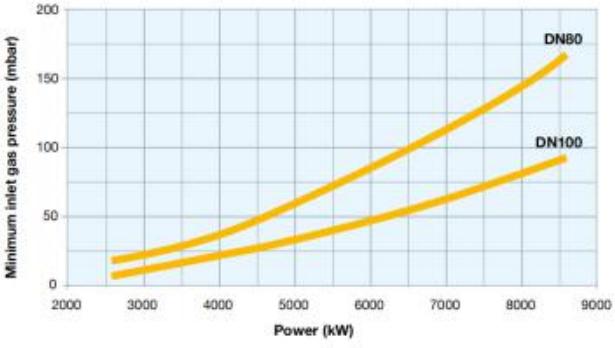
RX1025-FGR PR-MD



RX1030R-FGR PR-MD



RX1030-FGR PR-MD

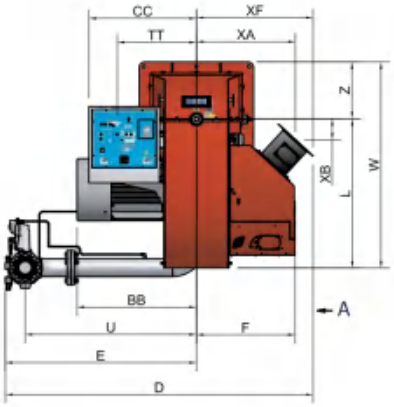


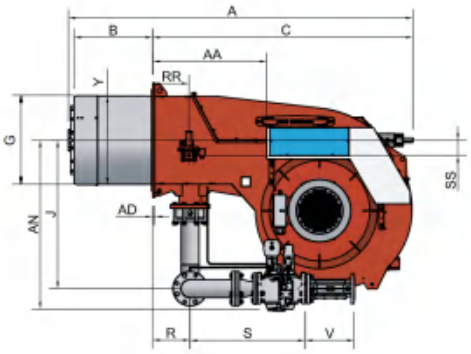
RX2050R-FGR RX2050-FGR duemila SERIES

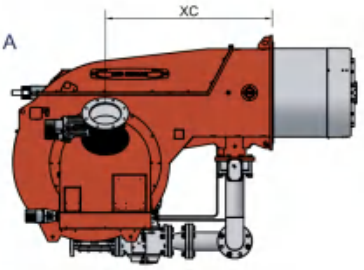
TECHNICAL SPECIFICATIONS

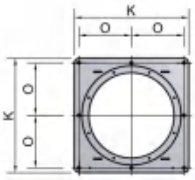
Type	Model	Power kW min.	Power kW max.	Electric power supply	Fan motor kW	Gas connections Rp	Noise level dBA
RX2050R-FGR	M-.xx.x.xx.A.1.xxx	1280	10400	230/400 V 3N ac	30,0	DN80 - DN100 - DN125	<92,5
RX2050-FGR	M-.xx.x.xx.A.1.xxx	2500	12160	230/400 V 3N ac	37,0	DN80 - DN100 - DN125	<92,5

The FGR burners are equipped with antivibrating joint (lenght 300 mm) to be assembled at FGR connection and FGR flange to be welded to the FGR pipe.

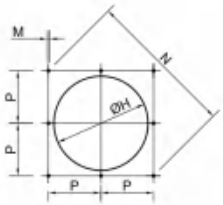








Recommended drilling template

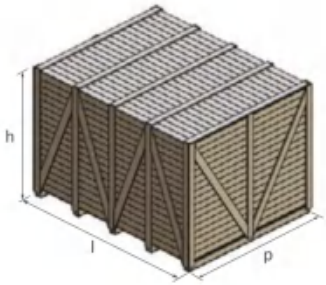


Burner flange

FGR flange

Type	Packaging dimensions (mm) l	p	h	kg
RX2050R-FGR	2540	1890	1820	1360
RX2050-FGR	2540	1890	1820	1390

Approximate values



Type	Overall dimensions (mm) XA	XB	XC	XF	XH
RX2050R-FGR	808	5	1065	400	300
RX2050-FGR	808	5	1065	400	300

Type	Model	Overall dimensions (mm) AA	A	AD	AP	BB	B*	C	CC	D	E	F	G*	H*	J	K	L	M	N	P	R	RR	S	U	V	W	Y	Z
RX2050R-FGR	M-.xx.x.xx.A.1.80.xx	741	2260	15	132	768	600	1660	735	2829	1604	638	550	600	845	730	949	M16	948	670	239	215	827	1478	310	1314	550	365
RX2050R-FGR	M-.xx.x.xx.A.1.100.xx	741	2260	15	145	768	600	1660	735	2829	1620	638	550	600	845	730	949	M16	948	670	239	215	874	1478	350	1314	550	365
RX2050R-FGR	M-.xx.x.xx.A.1.125.xx	741	2260	15	175	768	600	1660	735	2829	1634	638	550	600	845	730	949	M16	948	670	239	215	755	1478	480	1314	550	365
RX2050-FGR	M-.xx.x.xx.A.1.80.xx	741	2260	15	132	768	600	1660	735	2829	1604	638	577	600**	845	730	949	M16	948	670	239	215	827	1478	310	1314	577	365
RX2050-FGR	M-.xx.x.xx.A.1.100.xx	741	2260	15	145	768	600	1660	735	2829	1620	638	577	600**	845	730	949	M16	948	670	239	215	874	1478	350	1314	577	365
RX2050-FGR	M-.xx.x.xx.A.1.125.xx	741	2260	15	175	768	600	1660	735	2829	1634	638	577	600**	845	730	949	M16	948	670	239	215	755	1478	480	1314	577	365

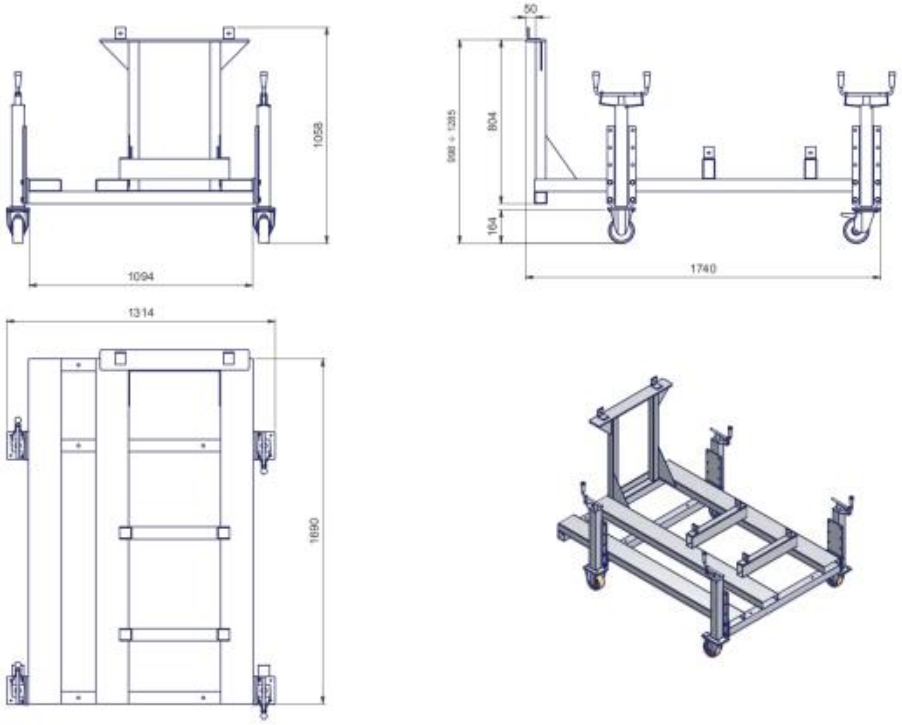
Approximate values

* B, G, H - To be confirmed before the order according to the requested burner output

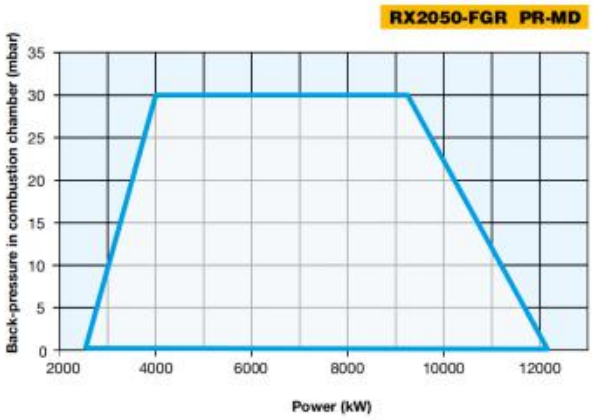
** Recommended counterflange

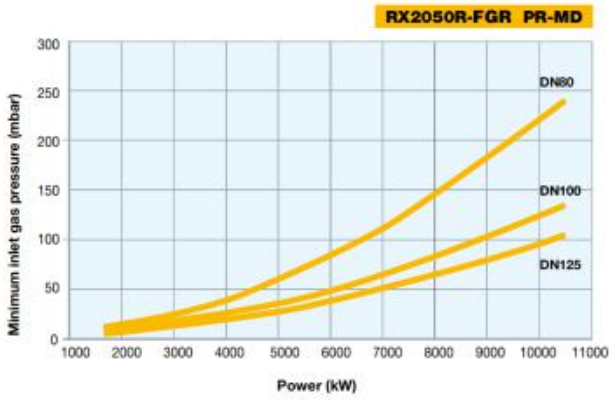
Monoblock burners 2000 series are supplied complete with a steel supporting frame: burner installation and manutention are greatly simplified.
The frame is equipped with wheels to easily move the burner, and its height is adjustable to match any type of boiler or furnace.

SUPPORTING FRAME FOR BURNERS 2050 SERIES



RX2050R-FGR RX2050-FGR

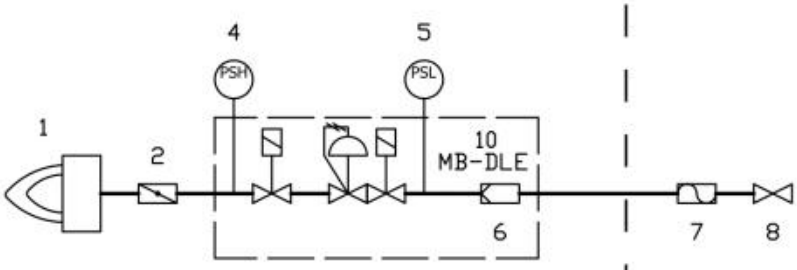




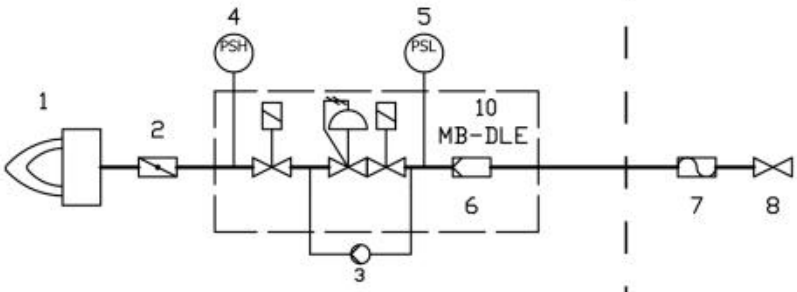
GAS TRAINS

MANUFACTURER | INSTALLER

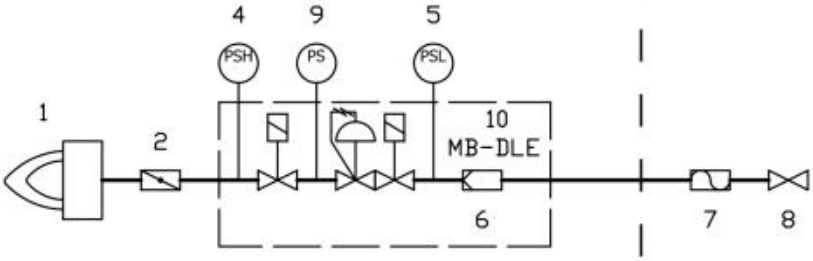
Gas train with valves group MB-DLE (2 valves + gas filter + pressure governor).



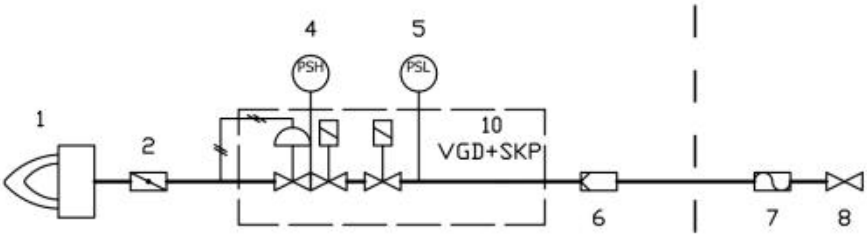
Gas train with valves group MB-DLE (2 valves + gas filter + pressure governor + leakage control VPS504).



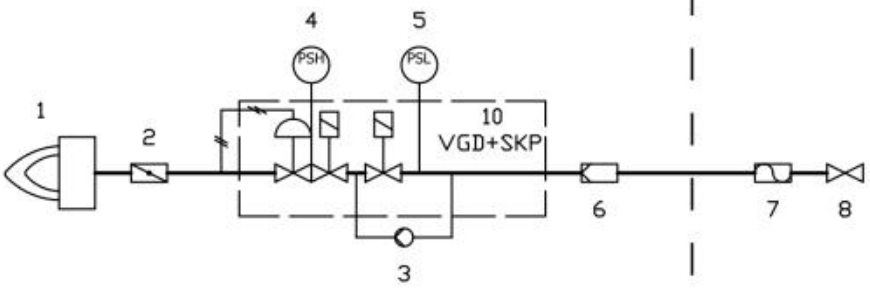
Gas train with valves group MB-DLE (2 valves + gas filter + pressure governor + leakage control pressure switch).



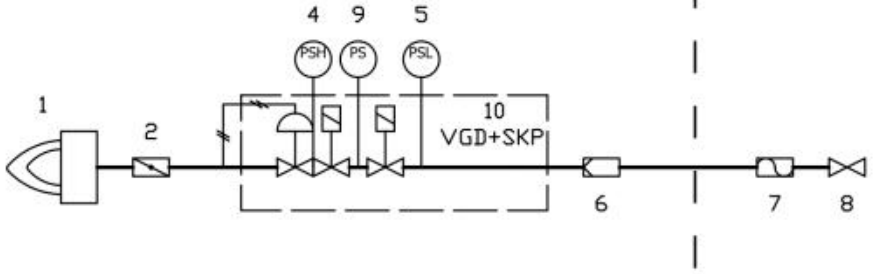
Gas train with valves group VGD with built-in gas pressure governor.



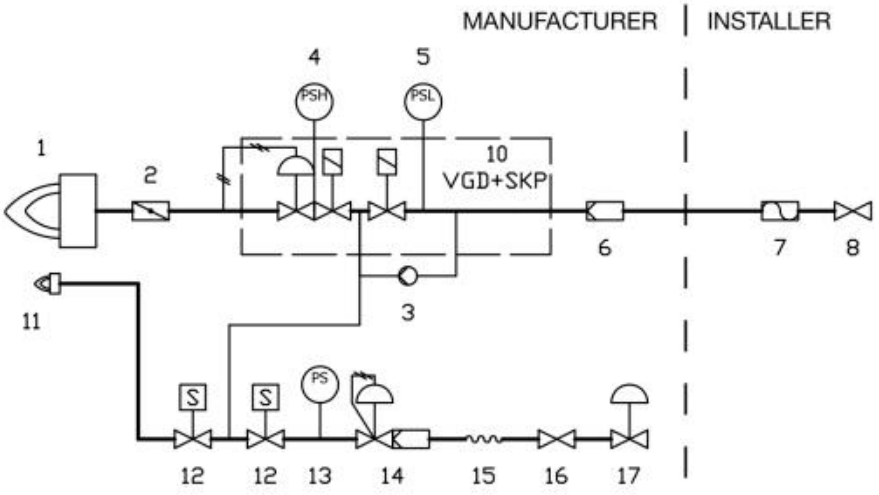
Gas train with valves group VGD with built-in gas pressure governor + leakage control VPS504.



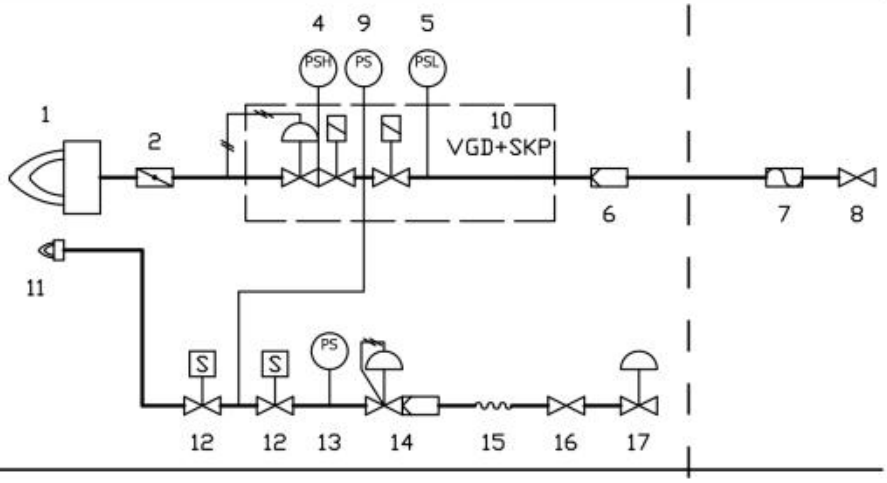
Gas train with valves group VGD with built-in gas pressure governor + leakage control pressure switch



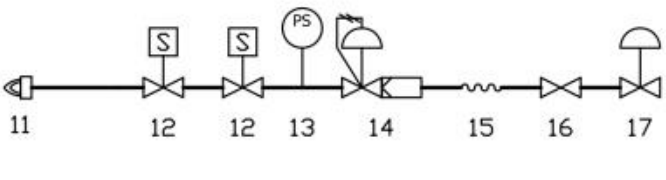
Gas train with valve group VGD, c/w built-in pressure governor+leakage control VPS504. Pilot train with double valve and filter/governor.



Gas train with valve group VGD, c/w built-in pressure governor+leakage control pressure switch. Pilot train with double valve and filter/governor.



Pilot train with double valve and pressure governor with filter.



KEY

1 Burner
2 Butterfly valve
3 Leakage control device (optional if output < 1.200 kW)
4 Maximum gas pressure switch (optional)
5 Minimum gas pressure switch
6 Gas filter
7 Anti-vibrating joint
8 Manual cut off valve
9 Leakage control pressure switch (optional if output < 1200 kW)
10 Valves group
11 Pilot burner
12 Pilot valve
13 Pilot minimum gas pressure switch
14 Pilot pressure governor
15 Pilot anti-vibrating joint
16 Pilot manual cut off valve
17 Pilot gas reducer (optional)

ELECTRONIC BURNERS (LMV51, LMV52)
MEDIUM TO HIGH POWER OUTPUT

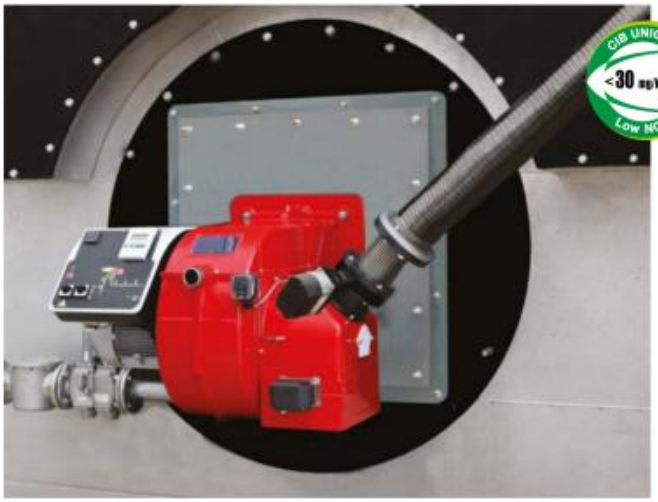
Model	Series	Fuel	LMV52.400	AZL 5x	SQM4x air	
EF	NOVANTA CINQUECENTO - MILLE - DUEMILA	gas	●	●	●	
EG	NOVANTA CINQUECENTO - MILLE - DUEMILA	gas	●	●	●	
ER	NOVANTA CINQUECENTO - MILLE - DUEMILA	gas	●	●	●	

EF - EG - ER = with temperature - compensated flue gas recirculation

* O_2 probe = ER only for O_2 monitoring

				
	SQM4x gas	SQM4x FGR	O_2 PROBE*	INVERTER
	●	●		
	●	●		●
	●	●	●	●

REFERENCES



Country : Italy
Burner RX512-FGR
Mingazzini boiler
Power 3100 kW
Measured NO_x emission : 26 mg/kWh

Country : Italy
Burner RX520-FGR
Mingazzini boiler
Power 4500 kW
Measured NOx emission : 25 mg/kWh

Country : Italy
Burner RX92-FGR (mechanical version)
ICI Boiler
Power 1600 kW
Measurement NO_x emission : 26 mg/kWh

0510-8377 6624

M029112 A Rel 0 09/2017

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CIB UNIGAS
Let's light up tomorrow

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