
baltur 75
1950 - 2025
Energy for People

# kW 650 - 7500

## TBG SERIES

Low NOx

CONFORM TO: GAS DIRECTIVE EU/2016/426 | E.M.C. DIRECTIVE 2014/30/UE | L.V. DIRECTIVE 2014/35/UE | MACHINERY DIRECTIVE 2006/42/CE | REFERENCE STANDARD EN676:2020/AC:2022

CE 0085

TBG 750 LX MC

TBG 750 LX ME

| Gas burner compliant with European standard EN676. Operation: | TBG 750 LX MC<br>mechanical two-stage progressive | TBG 750 LX ME<br>electronic modulation | TBG 750 LX ME V<br>electronic modulation |
|---|---|---|---|
| P.I.D. controller and signal receiver (0÷10V / 4÷20 mA) integrated in burner control panel | o | o | • |
| Modulation ratio: | 1:12 | 1:12 | 1:12 |
| Low NOx and CO emissions gas burner according to European standard EN676: | class 3 | class 3 | class 3 |
| Adjusting the combustion head | • | • | • |
| Maintenance facilitated by the possibility of removing the mixing unit without having to remove the burner from the boiler | • | • | • |
| Fixed boiler coupling flange | • | • | • |
| Easy maintenance thanks to the two-sides hinge which allows the removal of the combustion head without having to remove the burner from the boiler. | • | • | • |
| Combustion air intake with butterfly valve. Air flow adjustment: | mechanical cam | electric servomotor | electric servomotor |
| Fully closing air damper on shutdown to avoid loss of heat through the chimney | • | • | • |
| Device made of sound-absorbing material to reduce fan noise | • | • | • |
| Adjustment of fan revolutions according to working stage by means of a frequency converter in order to reduce noise and electric consumption | | | • |
| CE version gas train is complete with operation and safety valve with electromagnetic drive, valve tightness control, minimum pressure switch, pressure regulator and gas filter | • | • | • |
| Fail proof connectors for burner/gas train connection | • | • | • |
| Gas train outlet: | up/down | up/down | up/down |
| Flame detection by ionisation electrode with connector for microamperometer | • | • | • |
| Control panel with display diagram for working mode with indication lights | • | | |
| Control panel equipped either with display showing the working process and with the keyboard for the burner adjustment | | • | • |
| Electric protection rating: | IP54 | IP54 | IP54 |

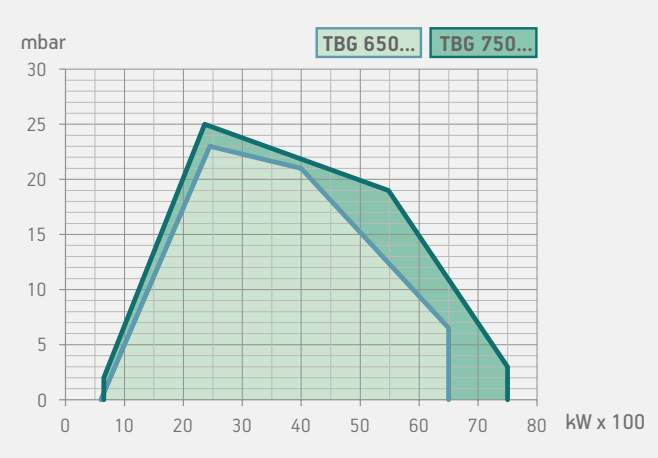
**LEGEND:**

o Optional, • As standard

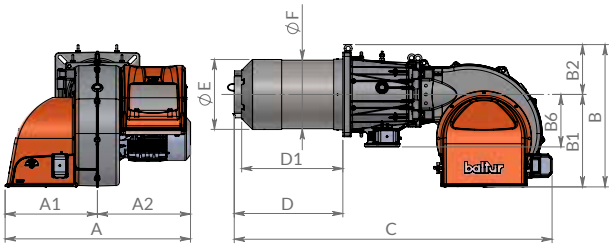
# kW 650 - 7500

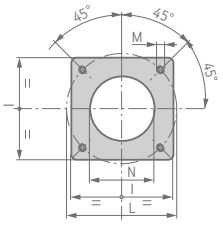
## TBG SERIES

CE 0085




| Model | Size of packaging L | P | H | Weight |
|---|---|---|---|---|
| | mm | | | kg |
| TBG 750 LX MC | 1500 | 1320 | 970 | 310 |
| TBG 750 LX ME | 1500 | 1320 | 970 | 310 |
| TBG 750 LX ME V | 1950 | 1510 | 1210 | 330 |




Picture 2

Flange dimensions and boiler drilling template.

| Model | A mm | A1 mm | A2 mm | B mm | B1 mm | B2 mm | B6 mm | C mm | D mm | D1 mm | E mm | F mm | I mm | L mm | M | N mm | Pic. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TBG 750 LX MC | 1180 | 530 | 650 | 810 | 525 | 285 | 295 | 1800 | 650 | 547 ÷ 597 | 397 | 410 | 480 | 520 ÷ 600 | M20 | 415 | 2 |
| TBG 750 LX ME | 1180 | 530 | 650 | 810 | 525 | 285 | 295 | 1850 | 650 | 547 ÷ 597 | 397 | 410 | 480 | 520 ÷ 600 | M20 | 415 | 2 |
| TBG 750 LX ME V | 1180 | 530 | 650 | 810 | 525 | 285 | 295 | 1850 | 650 | 547 ÷ 597 | 397 | 410 | 480 | 520 ÷ 600 | M20 | 415 | 2 |

| inverter | O2 Kit | CO Kit | Emissions class | Thermal output kW | Model | Part no. | Electrical supply | Motor kW | Note |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Frequency 50 Hz | | | | |
| | | | class 3 | 650 ÷ 7500 | **TBG 750 LX MC** | **18190010** | 3N AC 50Hz 400V | 18,5 | 4) |
| | | | class 3 | 650 ÷ 7500 | **TBG 750 LX ME** | **18200010** | 3N AC 50Hz 400V | 18,5 | 4) |
| ● | o | o | class 3 | 650 ÷ 7500 | **TBG 750 LX ME V** | **18200015** | 3N AC 50Hz 400V | 18,5 | 4) 10) |
| | | | | | Frequency 60 Hz | | | | |
| | | | class 3 | 650 ÷ 7500 | **TBG 750 LX MC** | **18195410** | 3N AC 60Hz 380V | 18,5 | 4) |
| | | | class 3 | 650 ÷ 7500 | **TBG 750 LX ME** | **18205410** | 3N AC 60Hz 380V | 18,5 | 4) |
| ● | o | o | class 3 | 650 ÷ 7500 | **TBG 750 LX ME V** | **18205415** | 3N AC 60Hz 380V | 18,5 | 4) 10) |

o Optional, ● As standard

### MODULATING MODE

| DESCRIPTION | PART NO. |
|---|---|
| TBG 750 LX MC: modulation kit | 98000055 |
| TBG 750 LX ME: modulation kit (Included in the ME V version) | 98000059 |
| TBG 750 LX MC/750 LX ME: modulating probe (see page 5) | |

### ACCESSORIES AVAILABLE ON REQUEST

| DESCRIPTION | PART NO. |
|---|---|
| O2 control kit NEW | 98000460 |
| CO control kit NEW | 98000461 |
| Reversing nozzle kit 19) | 98000436 |
| Soundproof burner cover (see page 9) | 97980058 |

### BURNER ACCESSORIES

Boiler coupling kit.

### NOTE

4 Equipped with automatic air closure device.
10 Inverter supplied separately, not included on the machine.
19 For applications on flame-reversing boilers, please get in contact with our commercial department.

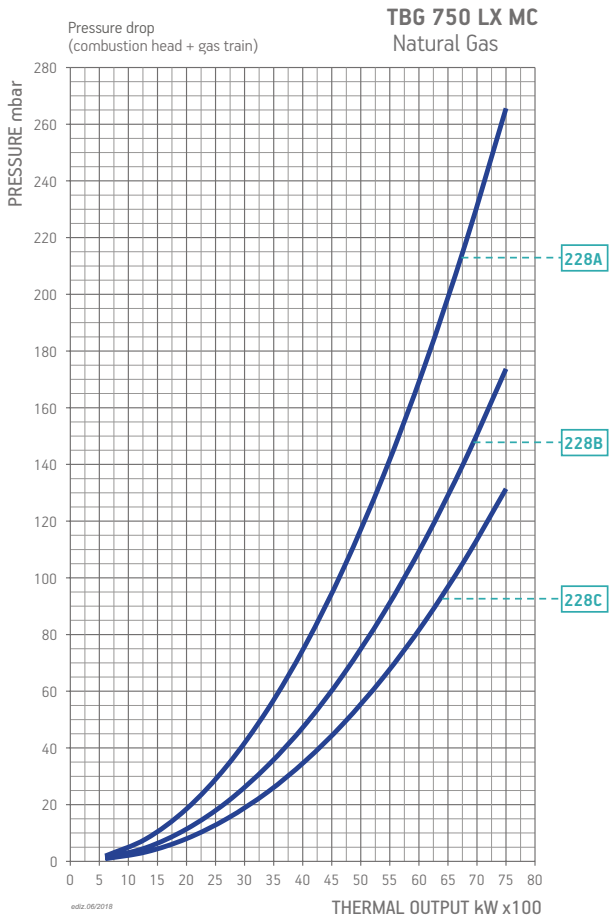
Net calorific value at reference conditions of 0°C, 1013mbar:
Natural gas: Hi = 35,80 MJ/m³ = 8550 kcal/m³,
For different type of gas and pressure values, please get in contact with our commercial department.

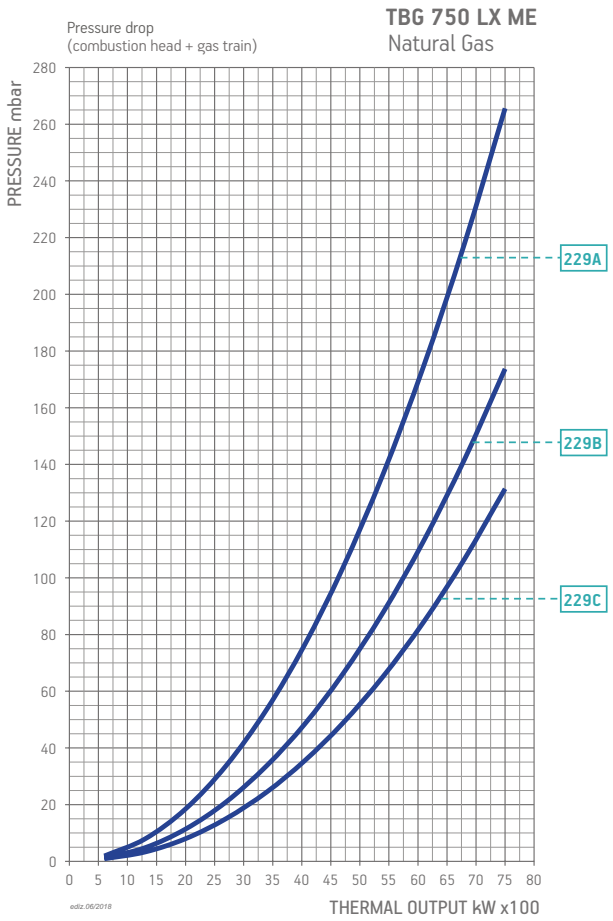
GAS BURNERS

# kW 650 - 7500

## TBG SERIES

### BURNER/GAS TRAIN MATCH




| Burner model | Gas type | Curve on graph | Version | P.Max ** mbar | Execution | Gas train | Regulator with incorporated filter | Burner/gas train adapter | Valve tightness control kit | Pic. | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Part no. | Part no. | Part no. | Part no. | | |
| TBG 750 LX MC | Natural gas | 228A | CE/EXP | 500 | CTV | 19990600 | Included | – | Included | D8 | |
| | | | CE/EXP | 500 | CTV | 19990759 | Included | – | Included | D8 | |
| | | 228B | CE/EXP | 500 | CTV | 19990601 | Included | – | Included | D8 | |
| | | | CE/EXP | 500 | CTV | 19990760 | Included | – | Included | D8 | |
| | | 228C | CE/EXP | 500 | CTV | 19990602 | Included | – | Included | D8 | |
| | | | CE/EXP | 500 | CTV | 19990761 | Included | – | Included | D8 | |
| TBG 750 LX ME/ME V | Natural gas | 229A | CE/EXP | 500 | CTV | 19990542 | Included | – | Included | D4 | |
| | | | CE/EXP | 500 | CTV | 19990680 | Included | – | Included | D4 | |
| | | 229B | CE/EXP | 500 | CTV | 19990543 | Included | – | Included | D4 | |
| | | | CE/EXP | 500 | CTV | 19990681 | Included | – | Included | D4 | |
| | | 229C | CE/EXP | 500 | CTV | 19990544 | Included | – | Included | D4 | |
| | | | CE/EXP | 500 | CTV | 19990682 | Included | – | Included | D4 | |

| Burner model | Gas type | Version | P.Max ** mbar | Execution | Gas train | Regulator with incorporated filter | Burner/gas train adapter | Valve tightness control kit | LPG kit | Pic. | Note |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Part no. | Part no. | Part no. | Part no. | Part no. | | |
| TBG 750 LX MC | LPG | CE/EXP | 500 | CTV | 19990600 | Included | – | Included | 98000487 | D8 | |
| TBG 750 LX ME/ME V | LPG | CE/EXP | 500 | CTV | 19990542 | Included | – | Included | 98000487 | D4 | |

To choose the correct gas train please refer to the information on page 17 of the Burners Catalogue.
For information on the structure, composition, and size of the gas train please refer to the diagrams on page 10.

### NOTE

CTV Gas train with Valve Tightness Control.
**) Maximum gas inlet pressure at pressure regulator.

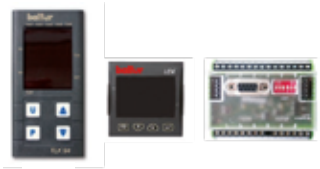
# MODULATION

The two stage progressive burners, by installing the PID load controller and related modulating kit, can operate as modulating burners with the ability to adjust the thermic load according to boiler needs. The load adjustment is possible between the minimum and maximum burner's operating point.

**How to choose the modulating kit components:**
According to the parameter that it's necessary to control: temperature (°C) or pressure (bar) it's necessary to choose the range kit according to boiler operating range.

In case the value is included in two ranges it's necessary to select the lower range.

**Example:**
In case the required hot water boiler set point is 100°C it's necessary to select the temperature probe kit with operating range between 0 ÷ 130°C.
In case the steam boiler must operate with 8bar outlet steam pressure it's necessary to select the pressure probe kit with operating range between 0 ÷ 10 bar.



LC3 LC4 LCM100

## Automatic proportional modulation regulator PID

| Part no. | Kit | Burners |
|---|---|---|
| 98000055 | Modulation kit LC3 | TBG 450 ÷ 2000 MC |
| 98000056 | Modulation kit LC3 | TBG 35 MC |
| 98000057 | Modulation kit LC3 | TBML 80 ÷ 360 MC |
| 98000058 | Modulation kit LC3 | TBG 45 ÷ 60 MC |
| 98000059 | Modulation kit LCM 100 | ME models |
| 98000065 | Modulation kit LC4 | TBG 80 ÷ 360 MC |

## Temperature probe for LC3 modulation

| Part no. | Temperature | Type robe | Probe length | Male coupling |
|---|---|---|---|---|
| 98000023 | 0 °C ÷ 130 °C | PT 1000 | 85 [1)] | R 1/2" |
| 98000021 | 0 °C ÷ 500 °C | PT 1000 | 200 [1)] | G 1/2" |
| 98000022 | 0 °C ÷ 1100 °C | Thermocouple | 425 [1)] | R 1/2" |

## Temperature probe for LCM 100 modulation

| Part no. | Temperature | Type robe | Probe length | Male coupling |
|---|---|---|---|---|
| 98000023 | 0 °C ÷ 130 °C | PT 1000 | 85 [1)] | R 1/2" |
| 98000021 | 0 °C ÷ 500 °C | PT 1000 | 200 [1)] | G 1/2" |

## Temperature probe for ETAMATIC OEM control box

| Part no. | Temperature | Type robe | Probe length | Male coupling |
|---|---|---|---|---|
| 98000035 | 0 °C ÷ 500 °C | PT 100 | 100 [1)] | G 1/2" |

## Steam pressure probe (for all types of automatic regulator)*

| Part no. | Pressure steam | Signal output | Male coupling |
|---|---|---|---|
| 98000045 | 0 ÷ 1 bar | 4 ÷ 20 mA | G 1/2" |
| 98000046 | 0 ÷ 10 bar | 4 ÷ 20 mA | G 1/2" |
| 98000047 | 0 ÷ 16 bar | 4 ÷ 20 mA | G 1/2" |
| 98000048 | 0 ÷ 25 bar | 4 ÷ 20 mA | G 1/2" |
| 98000049 | 0 ÷ 40 bar | 4 ÷ 20 mA | G 1/2" |

*) In the case of using applications where temperatures exceed 90°C you need to match the kit codes: 98000062
**NOTE: In combination with the LC4 modulation kit for MC models, a 12V power supply kit is mandatory.**

| | |
|---|---|
| 98000482 | 12V power supply kit |

## External climate regulation

| Part no. | Description | Temperature |
|---|---|---|
| 85060070 | Temperature probe PT100 | -50 °C ÷ 90 °C |
| 98000061 | Interface module for LC3 | |

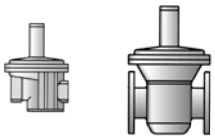
## Power signal converter (TBG 45÷360 MC / LX MC)

| Part no. | Description |
|---|---|
| 98000063 | Converter kit 0 ÷ 10 V / 4 ÷ 20 mA |

## UV safe kit

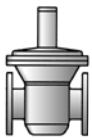
| Part no. | Description |
|---|---|
| 98000443 | UV SAFE KIT TBG 80-360 FGR |
| 98000444 | UV SAFE KIT TBG 450-750 FGR |
| 98000445 | UV SAFE KIT TBG 800 FGR |
| 98000446 | UV SAFE KIT TBG 1200 FGR |

**Note:** For different modulation values please contact our Technical Assistance Service.
1) Different lengths on request.



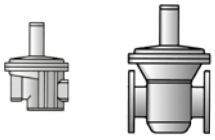
**Gas pressure regulator with incorporated filter approved CE***
Control closing , pressure taps upstream side - the side valley , safety diaphragm.
Max inlet pressure : 1 bar.

| Part no. | Model | Outlet pressure mbar | Gas connection |
|---|---|---|---|
| 97392010 | BTFR/1 | 40 ÷ 110 | 1/2" |
| 97392020 | BTFR/1 | 40 ÷ 110 | 3/4" |
| 97392030 | BTFR/1 | 40 ÷ 110 | 1" |
| 97392040 | BTFR/1 | 90 ÷ 190 | 1"1/4 |
| 97392050 | BTFR/1 | 90 ÷ 190 | 1"1/2 |
| 97392060 | BTFR/1 | 90 ÷ 190 | 2" |
| 97392070 | BTFR/1 | 110 ÷ 200 | DN65 - PN16 |
| 97392080 | BTFR/1 | 110 ÷ 200 | DN80 - PN16 |
| 97392090 | BTFR/1 | 130 ÷ 200 | DN100 - PN16 |



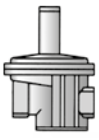
**CE gas pressure regulator CE***
Control closing , pressure taps upstream side - the side valley , safety diaphragm.
Max inlet pressure : 1 bar.

| Part no. | Model | Outlet pressure mbar | Gas connection |
|---|---|---|---|
| 97392100 | BTR/1 | 100 ÷ 250 | DN125 - PN16 |
| 97392110 | BTR/1 | 100 ÷ 250 | DN150 - PN16 |



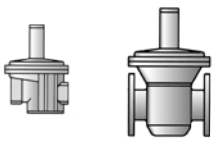
**Gas pressure regulator with incorporated filter approved CE***
Control closing , pressure taps upstream side - the side valley , safety diaphragm.
Max inlet pressure : 2 bar.

| Part no. | Model | Outlet pressure mbar | Gas connection |
|---|---|---|---|
| 97392210 | BTFR/2 | 40 ÷ 110 | 1/2" |
| 97392220 | BTFR/2 | 40 ÷ 110 | 3/4" |
| 97392230 | BTFR/2 | 40 ÷ 110 | 1" |
| 97392240 | BTFR/2 | 90 ÷ 190 | 1"1/4 |
| 97392250 | BTFR/2 | 90 ÷ 190 | 1"1/2 |
| 97392260 | BTFR/2 | 90 ÷ 190 | 2" |
| 97392270 | BTFR/2 | 110 ÷ 200 | DN65 - PN16 |
| 97392280 | BTFR/2 | 110 ÷ 200 | DN80 - PN16 |
| 97392290 | BTFR/2 | 130 ÷ 200 | DN100 - PN16 |



**Gas pressure regulator with incorporated filter approved CE***
Control closing , pressure taps upstream side - the side valley , safety diaphragm.
Max inlet pressure : 6 bar.

| Part no. | Model | Outlet pressure mbar | Gas connection |
|---|---|---|---|
| 97392310 | BTFR/6 | 30 ÷ 90 | 1/2" |
| 97392320 | BTFR/6 | 30 ÷ 90 | 3/4" |
| 97392330 | BTFR/6 | 30 ÷ 90 | 1" |



**CE gas pressure regulator CE***
Control closing , pressure taps upstream side - the side valley , safety diaphragm.
Max inlet pressure : 6 bar.

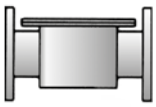
| Part no. | Model | Outlet pressure mbar | Gas connection |
|---|---|---|---|
| 97392340 | BTR/6 | 85 ÷ 180 | 1"1/4 |
| 97392350 | BTR/6 | 85 ÷ 180 | 1"1/2 |
| 97392360 | BTR/6 | 85 ÷ 180 | 2" |
| 97392370 | BTR/6 | 110 ÷ 200 | DN65 - PN16 |
| 97392380 | BTR/6 | 110 ÷ 200 | DN80 - PN16 |
| 97392390 | BTR/6 | 110 ÷ 200 | DN100 - PN16 |

*) All the pressure regulators in these pages have a standard spring with its own adjustment field For different delivery pressures, the able below shows the regulation field that must be used, as well as the corresponding spring to replace the standard one with.

## PRESSURE REGULATOR SPRINGS

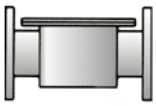
| | | | 1/2" | 3/4" | 1" | 1"1/4 | 1"1/2 | 2" | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRESSURE INPUT 1bar | | regulator code | 97392010 | 97392020 | 97392030 | 97392040 | 97392050 | 97392060 | 97392070 | 97392080 | 97392090 | 97392100 | 97392110 |
| | code spring | 97399002 | 9 ÷ 28 | 9 ÷ 28 | 9 ÷ 28 | | | | | | | | |
| | | 97399005 | 18 ÷ 40 | 18 ÷ 40 | 18 ÷ 40 | | | | | | | | |
| | | 97399007 | | | | 13 ÷ 23 | 13 ÷ 23 | 13 ÷ 23 | | | | | |
| | | 97399008 | **40 ÷ 110*** | **40 ÷ 110*** | **40 ÷ 110*** | | | | | | | | |
| | | 97399009 | | | | 20 ÷ 36 | 20 ÷ 36 | 20 ÷ 36 | | | | | |
| | | 97399010 | 110 ÷ 150 | 110 ÷ 150 | 110 ÷ 150 | | | | | | | | |
| | | 97399011 | 150 ÷ 200 | 150 ÷ 200 | 150 ÷ 200 | 33 ÷ 58 | 33 ÷ 58 | 33 ÷ 58 | | | | | |
| | | 97399012 | | | | 55 ÷ 100 | 55 ÷ 100 | 55 ÷ 100 | | | | | |
| | | 97399013 | | | | | | | 13 ÷ 27 | 13 ÷ 27 | 15 ÷ 27 | | |
| | | 97399014 | | | | | | | 22 ÷ 50 | 22 ÷ 50 | 22 ÷ 55 | | |
| | | 97399015 | 200 ÷ 600 | 200 ÷ 600 | 200 ÷ 600 | | | | | | | | |
| | | 97399016 | | | | **90 ÷ 190*** | **90 ÷ 190*** | **90 ÷ 190*** | | | | | |
| | | 97399017 | | | | | | | 50 ÷ 130 | 50 ÷ 130 | 55 ÷ 130 | | |
| | | 97399018 | | | | | | | **110 ÷ 200*** | **110 ÷ 200*** | **130 ÷ 200*** | | |
| | | 97399019 | | | | | | | | | | 20 ÷ 150 | 20 ÷ 150 |
| | | 97399020 | | | | | | | | | | **100 ÷ 250*** | **100 ÷ 250*** |
| | | 97399021 | | | | | | | | | | 230 ÷ 350 | 230 ÷ 350 |
| | | 97399022 | | | | | | | | | | 300 ÷ 450 | 300 ÷ 450 |
| PRESSURE INPUT 2 bar | | regulator code | 97392210 | 97392220 | 97392230 | 97392240 | 97392250 | 97392260 | 97392270 | 97392280 | 97392290 | | |
| | code spring | 97399001 | 9 ÷ 22 | 9 ÷ 22 | 9 ÷ 22 | | | | | | | | |
| | | 97399005 | 20 ÷ 40 | 20 ÷ 40 | 20 ÷ 40 | | | | | | | | |
| | | 97399008 | **40 ÷ 110*** | **40 ÷ 110*** | **40 ÷ 110*** | 12 ÷ 35 | 12 ÷ 35 | 12 ÷ 35 | | | | | |
| | | 97399010 | 110 ÷ 150 | 110 ÷ 150 | 110 ÷ 150 | 30 ÷ 50 | 30 ÷ 50 | 30 ÷ 50 | | | | | |
| | | 97399011 | 150 ÷ 200 | 150 ÷ 200 | 150 ÷ 200 | 40 ÷ 60 | 40 ÷ 60 | 40 ÷ 60 | | | | | |
| | | 97399012 | | | | 60 ÷ 95 | 60 ÷ 95 | 60 ÷ 95 | | | | | |
| | | 97399013 | | | | | | | 13 ÷ 27 | 13 ÷ 27 | 15 ÷ 27 | | |
| | | 97399014 | | | | | | | 22 ÷ 50 | 22 ÷ 50 | 27 ÷ 55 | | |
| | | 97399015 | 200 ÷ 600 | 200 ÷ 600 | 200 ÷ 600 | | | | | | | | |
| | | 97399016 | | | | **90 ÷ 190*** | **90 ÷ 190*** | **90 ÷ 190*** | | | | | |
| | | 97399017 | | | | | | | 50 ÷ 130 | 50 ÷ 130 | 55 ÷ 130 | | |
| | | 97399018 | | | | | | | **110 ÷ 200*** | **110 ÷ 200*** | **130 ÷ 200*** | | |
| PRESSURE INPUT 6 bar | | regulator code | 97392310 | 97392320 | 97392330 | 97392340 | 97382350 | 97392360 | 97392370 | 97392380 | 97392390 | | |
| | code spring | 97399003 | 20 ÷ 30 | 20 ÷ 30 | 20 ÷ 30 | | | | | | | | |
| | | 97399004 | **30 ÷ 90*** | **30 ÷ 90*** | **30 ÷ 90*** | | | | | | | | |
| | | 97399006 | 90 ÷ 170 | 90 ÷ 170 | 90 ÷ 170 | | | | | | | | |
| | | 97399009 | | | | 15 ÷ 33 | 15 ÷ 33 | 15 ÷ 33 | | | | | |
| | | 97399011 | | | | 32 ÷ 60 | 32 ÷ 60 | 32 ÷ 60 | | | | | |
| | | 97399012 | | | | 50 ÷ 95 | 50 ÷ 95 | 50 ÷ 95 | | | | | |
| | | 97399013 | | | | | | | 13 ÷ 27 | 13 ÷ 27 | 13 ÷ 22 | | |
| | | 97399014 | | | | | | | 22 ÷ 58 | 22 ÷ 58 | 18 ÷ 40 | | |
| | | 97399016 | | | | **85 ÷ 180*** | **85 ÷ 180*** | **85 ÷ 180*** | | | | | |
| | | 97399017 | | | | | | | 50 ÷ 130 | 50 ÷ 130 | 25 ÷ 120 | | |
| | | 97399018 | | | | | | | **110 ÷ 200*** | **110 ÷ 200*** | **110 ÷ 200*** | | |

*) of series.



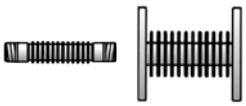
**Gas filters approved CE**
With pressure.
Max inlet pressure: 2 bar.

| Part no. | Model | Gas connection |
|---|---|---|
| 97410001 | BTF | 1/2" FF |
| 97410002 | BTF | 3/4" FF |
| 97410003 | BTF | 1" FF |
| 97410004 | BTF | 1"1/4 FF |
| 97410005 | BTF | 1"1/2 FF |
| 97410006 | BTF | 2" FF |
| 97419999 | BTF | DN65 - PN16 |
| 97429999 | BTF | DN80 - PN16 |
| 97439999 | BTF | DN100 - PN16 |
| 97459999 | BTF | DN125 - PN16 |
| 97449999 | BTF | DN150 - PN16 |



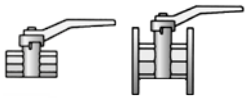
**Gas filters approved CE**
With pressure.
Max inlet pressure: 6 bar.

| Part no. | Model | Gas connection |
|---|---|---|
| 97410010 | BTF/6 | 1" 1/4" FF |
| 97410011 | BTF/6 | 1" 1/2" FF |
| 97410012 | BTF/6 | 2" FF |
| 97410013 | BTF/6 | DN65 - PN16 |
| 97410014 | BTF/6 | DN80 - PN16 |
| 97410015 | BTF/6 | DN100 - PN16 |



**Anti-vibration and compensation joints approved CE**
DIN 30681 stainless steel.

| Part no. | Model | Gas connection |
|---|---|---|
| 97029999 | BTGA | 1/2" MM |
| 97039999 | BTGA | 3/4" MM |
| 97049999 | BTGA | 1" MM |
| 97059999 | BTGA | 1" 1/4" MM |
| 97069999 | BTGA | 1" 1/2" MM |
| 97079999 | BTGA | 2" MM |
| 97089999 | BTGA | DN65 - PN16 |
| 97099999 | BTGA | DN80 - PN16 |
| 97109999 | BTGA | DN100 - PN16 |
| 97119999 | BTGA | DN125 - PN16 |
| 97129999 | BTGA | DN150 - PN16 |

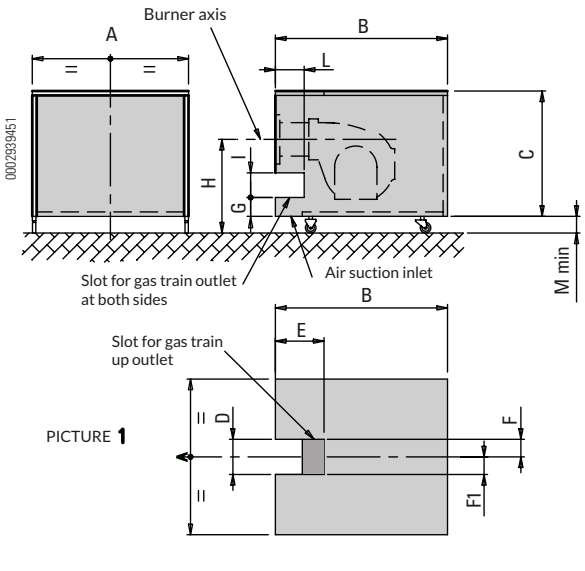


**Ball valves approved CE**

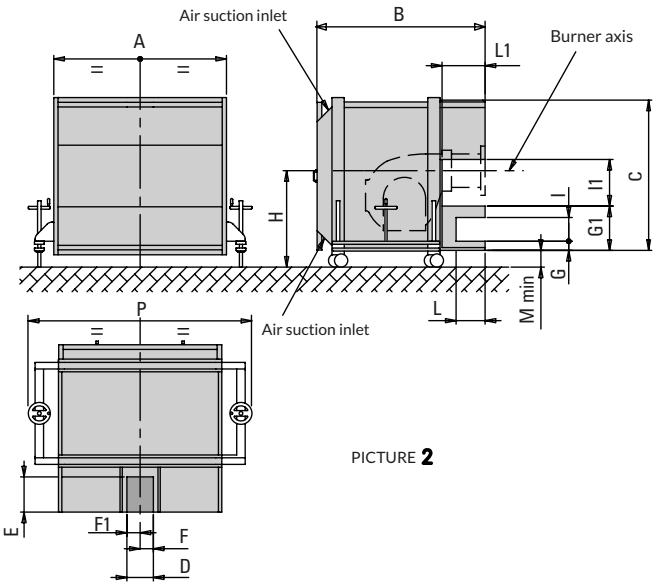
| Part no. | Model | Gas connection |
|---|---|---|
| 97679999 | BTVS | 3/8" FF |
| 97689999 | BTVS | 1/2" FF |
| 97699999 | BTVS | 3/4" FF |
| 97709999 | BTVS | 1" FF |
| 97719999 | BTVS | 1" 1/4" FF |
| 97729999 | BTVS | 1" 1/2" FF |
| 97739999 | BTVS | 2" FF |
| 97749999 | BTVS | DN65 - PN16 |
| 97759999 | BTVS | DN80 - PN16 |
| 97769999 | BTVS | DN100 - PN16 |
| 97179999 | BTVS | DN125 - PN16 |
| 97189999 | BTVS | DN150 - PN16 |

# SOUNDPROOF BURNER

Average sound pressure reduction of about 10 dB(A) measured in a laboratory with 1 meter microphone from the burner.




PICTURE **1**




PICTURE **2**

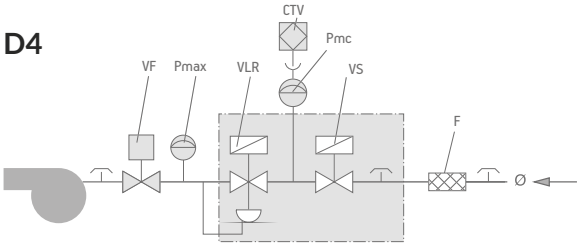
| Model | Sound pressure | Pic. | A | B | C | D | E | F | F1 | G | G1 | H mm | | I | I1 | L | L1 | M min | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | min | max | mm | mm | mm | mm | mm | mm |
| 97980053* | -10 dB(A) | 1 | 1100 | 1340 | 860 | 85 | 500 | 42,5 | 42,5 | 207 | - | 660 | 1350 | 85 | - | 500 | - | 190 | - |
| 97980054 | -10 dB(A) | 1 | 750 | 1080 | 650 | 85 | 380 | 42,5 | 42,5 | 157 | - | 560 | 1060 | 85 | - | 355 | - | 190 | - |
| 97980055 | -10 dB(A) | 1 | 1100 | 1340 | 860 | 85 | 440 | 42,5 | 42,5 | – | - | 650 | 1300 | – | - | – | – | 190 | - |
| 97980057 | -10 dB(A) | 1 | 1335 | 1655 | 1130 | 210 | 495 | 47,5 | 162,5 | – | - | 900 | 1700 | – | - | – | – | 190 | - |
| 97980058* | -10 dB(A) | 1 | 1610 | 1740 | 1190 | 500 | 380 | 37,5 | 462,5 | 24,5 | - | 950 | 1700 | 210 | - | 380 | - | 190 | - |
| 97980059 | -20 dB(A) | 1 | 1560 | 1645 | 1190 | 500 | 380 | 37,5 | 462,5 | 245 | - | 950 | 1700 | 210 | - | 380 | - | 190 | - |
| 97980061 | -20 dB(A) | 2 | 1956 | 1945 | 1740 | 300 | 400 | 150 | 150 | 104 | 504 | 1450 | 1700 | 270 | 530 | 330 | 490 | 180 | 2540 |
| 97980063 | -20 dB(A) | 2 | 2180 | 1950 | 1830 | 350 | 410 | 175 | 175 | 85 | 480 | 1400 | 1200 | 310 | 580 | 345 | 505 | 195 | 2765 |

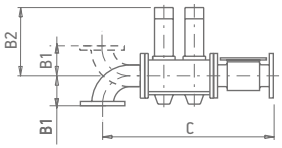
Note:
For gas burners in case of gas train up outlet it is necessary to install a 200 mm long cilindric extension.
*) To decrease the sound pressure by 20 dB(A) please contact our sales office.

**ATTENTION:**
It'scustomer responsability to check the correct matching of soundproof according to the height of the boiler.

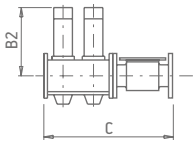
# GAS TRAIN STRUCTURE AND COMPOSITION

## D4

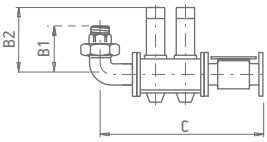



Pic. 1




Pic. 2



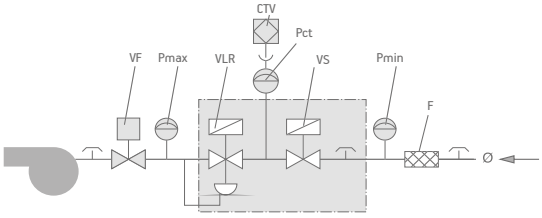

Pic. 3

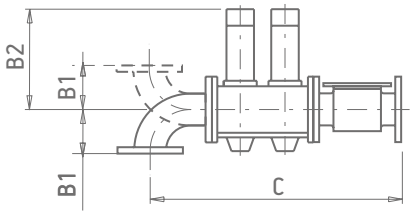
| Gas train Part no. | Position | | | | | | | | Gas train dimensions mm | | | Size of packaging mm | Weight | Pic. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CTV | F | Pmax | Pmc | VF | VLR | VS | Ø | B1 | B2 | C | L x P x H | kg | |
| 19990541 (VGD20.503 - 2") | ● | 2" | ● | ● | ◆ | ● | ● | 2" | 145 | 285 | 890 | 990 x 300 x 500 | 23 | 1 |
| 19990542 (VGD40.065 - 2"1/2) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | 135 | 320 | 970 | 1380 x 430 x 700 | 36 | 1 |
| 19990543 (VGD40.080 - 3") | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 135 | 325 | 1010 | 1380 x 430 x 700 | 38 | 1 |
| 19990544 (VGD40.100 - 4") | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 175 | 330 | 1100 | 1380 x 430 x 700 | 44 | 1 |
| 19990588 (VGD40.065 - 2"1/2) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | – | 320 | 580 | 830 x 430 x 640 | 26 | 2 |
| 19990589 (VGD40.080 - 3") | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | – | 325 | 630 | 830 x 430 x 640 | 29 | 2 |
| 19990590 (VGD40.100 - 4") | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | – | 330 | 730 | 830 x 430 x 640 | 40 | 2 |
| 19990606 (VGD40.080 - 3") | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 165 | 325 | 1015 | 1380 x 430 x 700 | 38 | 1 |
| 19990607 (VGD40.100 - 4") | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 175 | 330 | 1100 | 1380 x 430 x 700 | 44 | 1 |
| 19990608 (VGD40.125 - 5") | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 170 | 350 | 1275 | 1580 x 430 x 720 | 60 | 1 |
| 19990618 (VGD40.100 - 4") | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 200 | 330 | 1260 | 1380 x 430 x 710 | 45 | 1 |
| 19990619 (VGD40.125 - 5") | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 209 | 350 | 1410 | 1580 x 430 x 740 | 83 | 1 |
| 19990620 (VGD40.150 - 6") | ● | DN150 | ● | ● | ◆ | ● | ● | DN150 | 200 | 370 | 1490 | 1580 x 430 x 740 | 95 | 1 |
| 19990626 (VGD40.150 - 6") | ● | DN150 | ● | ● | ◆ | ● | ● | DN150 | 170 | 370 | 1280 | 1580 x 430 x 720 | 95 | 1 |
| 19990633 (VGD40.080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 132 | 314 | 1006 | 1380 x 430 x 600 | 17 | 1 |
| 19990634 (VGD40.100) | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 163 | 331 | 1096 | 1380 x 430 x 610 | 30 | 1 |
| 19990640 (VGD40.100 - 4") | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 175 | 330 | 1100 | 1380 x 430 x 700 | 44 | 1 |
| 19990641 (VGD40.125 - 5") | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 170 | 350 | 1275 | 1580 x 430 x 720 | 60 | 1 |
| 19990648 (VGD40.100 - 4") | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 200 | 330 | 1260 | 1380 x 430 x 710 | 45 | 1 |
| 19990649 (VGD40.125 - 5") | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 207 | 350 | 1312 | 1580 x 430 x 740 | 83 | 1 |
| 19990650 (VGD40.150 - 6") | ● | DN150 | ● | ● | ◆ | ● | ● | DN150 | 200 | 370 | 1485 | 1580 x 430 x 740 | 95 | 1 |
| 19990666 (VGD20.065 - 2"1/2) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | 135 | 285 | 1120 | 1380 x 430 x 700 | 45 | 1 |
| 19990674 (VGD40.125) | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 163 | 349 | 1173 | 1580 x 430 x 630 | 42 | 1 |
| 19990679 (MBE 050) | ● | 2" | ● | ● | ◆ | ● | ● | 2" | 135 | 311 | 880 | 990 x 300 x 500 | 22 | 1 |
| 19990680 (MBE 065) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | 105 | 380 | 970 | 1380 x 430 x 700 | 38 | 1 |
| 19990681 (MBE 080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 1005 | 1380 x 430 x 700 | 40 | 1 |
| 19990682 (MBE 100) | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 110 | 380 | 1100 | 1380 x 430 x 700 | 45 | 1 |
| 19990683 (MBE 080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 1005 | 1380 x 430 x 700 | 40 | 1 |
| 19990684 (MBE 100) | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 110 | 380 | 1100 | 1380 x 430 x 700 | 45 | 1 |
| 19990685 (MBE 125) | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 130 | 380 | 1175 | 1580 x 430 x 720 | 58 | 1 |
| 19990686 (MBE 080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 1015 | 1370 x 420 x 710 | 47 | 1 |
| 19990687 (MBE 100) | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 110 | 380 | 1100 | 1380 x 430 x 700 | 55 | 1 |
| 19990688 (MBE 125) | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 128 | 380 | 1280 | 1580 x 430 x 720 | 58 | 1 |
| 19990689 (MBE 100) | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 110 | 380 | 1135 | 1380 x 430 x 710 | 46 | 1 |
| 19990690 (MBE 125) | ● | DN125 | ● | ● | ◆ | ● | ● | DN125 | 128 | 380 | 1285 | 1580 x 430 x 740 | 81 | 1 |
| 19990691 (MBE 150) | ● | DN150 | ● | ● | ◆ | ● | ● | DN150 | 142 | 380 | 1355 | 1580 x 430 x 740 | 93 | 1 |
| 19990725 (MBE 050) | ● | 2" | ● | ● | ◆ | ● | ● | 2" | 99 | 311 | 878 | 990 x 300 x 500 | 13 | 3 |
| 19990726 (MBE 065) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | 105 | 380 | 1118 | 1380 x 430 x 700 | 28 | 3 |
| 19990727 (MBE 080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 1190 | 1380 x 430 x 700 | 30 | 3 |
| 19990728 (MBE 065) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | 125 | 380 | 760 | 1030 x 430 x 650 | 52 | 1 |
| 19990729 (MBE 080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 850 | 1030 x 430 x 650 | 59 | 1 |
| 19990743 (MBE 065) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | 105 | 380 | 582 | 830 x 430 x 640 | 28 | 1 |
| 19990744 (MBE 080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 622 | 830 x 430 x 640 | 31 | 1 |
| 19990745 (MBE 100) | ● | DN100 | ● | ● | ◆ | ● | ● | DN100 | 105 | 380 | 702 | 830 x 430 x 640 | 41 | 1 |
| 19990751 (VGD20.050) | ● | 2" | ● | ● | ◆ | ● | ● | 2" | 114 | 255 | 890 | 990 x 300 x 500 | 14 | 3 |
| 19990752 (VGD40.065) | ● | DN65 | ● | ● | ◆ | ● | ● | DN65 | 114 | 318 | 1090 | 1380 x 430 x 700 | 26 | 3 |
| 19990753 (VGD40.080) | ● | DN80 | ● | ● | ◆ | ● | ● | DN80 | 114 | 325 | 1175 | 1380 x 430 x 700 | 28 | 3 |

**CTV** Valve tightness control.
**F** Filter.
**LDU** LDU valve tightness control.
**Pct** Pressure switch for gas control.
**Pmax** Maximum pressure switch.
**Pmc** Minimum and control pressure switch gas leaks.
**Pmin** Minimum pressure switch.
**R** Pressure regulator.
**RF** Pressure regulator with filter.
**RFP** Pressure regulator with filter for pilot gas train.
**RM** Manual flow rate regulator.
**RP** Pneumatic regualtor.
**VF** Regulator throttle valve.
**VL** Operating valve.
**VL2** Two-stage operating valve.
**VLP** Operating pilot valve.
**VLR** Operating valve with pressure regulator.
**VP** Pilot valve.
**VPS** VPS valve tightness control.
**VS** Safety valve.
**VSP** Safety pilot valve.
**Ø** Gas train diameter.
**Ø1** Main gas train diameter.
**Ø2** Pilot gas train diameter.

● As Standard.
▲ As standard for burners with an output of more than 1200 kW, on request for burners with an output of less than 1200 kW.
■ On request.
◆ Mounted on burner.

## D8




| Gas train Part no. | Position | | | | | | | | | Gas train dimensions mm | | | Size of packagingmm | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CTV | F | Pct | Pmax | Pmin | VF | VLR | VS | Ø | B1 | B2 | C | L x P x H | kg |
| 19990599 (VGD20.503 - 2") | ● | 2" | ● | ● | ● | ◆ | ● | ● | 2" | 145 | 285 | 890 | 990 x 300 x 500 | 23 |
| 19990600 (VGD40.065 - 2"1/2) | ● | DN65 | ● | ● | ● | ◆ | ● | ● | DN65 | 135 | 320 | 970 | 1380 x 430 x 700 | 36 |
| 19990601 (VGD40.080 - 3") | ● | DN80 | ● | ● | ● | ◆ | ● | ● | DN80 | 135 | 325 | 1010 | 1380 x 430 x 700 | 38 |
| 19990602 (VGD40.100 - 4") | ● | DN100 | ● | ● | ● | ◆ | ● | ● | DN100 | 175 | 330 | 1100 | 1380 x 430 x 700 | 44 |
| 19990615 (VGD40.080 - 3") | ● | DN80 | ● | ● | ● | ◆ | ● | ● | DN80 | 165 | 325 | 1015 | 1380 x 430 x 700 | 38 |
| 19990616 (VGD40.100 - 4") | ● | DN100 | ● | ● | ● | ◆ | ● | ● | DN100 | 175 | 330 | 1100 | 1380 x 430 x 700 | 44 |
| 19990617 (VGD40.125 - 5") | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN125 | 170 | 350 | 1275 | 1580 x 430 x 720 | 60 |
| 19990627 (VGD40.150 - 6") | ● | DN150 | ● | ● | ● | ◆ | ● | ● | DN150 | 170 | 370 | 1280 | 1580 x 430 x 720 | 95 |
| 19990665 (VGD20.065 - 2"1/2) | ● | DN65 | ● | ● | ● | ◆ | ● | ● | DN65 | 135 | 285 | 1120 | 1380 x 430 x 700 | 45 |
| 19990683 (MBE 080) | ● | DN80 | ● | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 1005 | 1380 x 430 x 700 | 40 |
| 19990684 (MBE 100) | ● | DN100 | ● | ● | ● | ◆ | ● | ● | DN100 | 110 | 380 | 1100 | 1380 x 430 x 700 | 45 |
| 19990685 (MBE 125) | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN125 | 130 | 380 | 1175 | 1580 x 430 x 720 | 58 |
| 19990758 (MBE 050) | ● | 2" | ● | ● | ● | ◆ | ● | ● | 2" | 145 | 311 | 890 | 990 x 300 x 500 | 22 |
| 19990759 (MBE 065) | ● | DN65 | ● | ● | ● | ◆ | ● | ● | DN65 | 105 | 380 | 970 | 1380 x 430 x 700 | 38 |
| 19990760 (MBE 080) | ● | DN80 | ● | ● | ● | ◆ | ● | ● | DN80 | 105 | 380 | 1005 | 1380 x 430 x 700 | 40 |
| 19990761 (MBE 100) | ● | DN100 | ● | ● | ● | ◆ | ● | ● | DN100 | 110 | 380 | 1100 | 1380 x 430 x 700 | 45 |
| 19990793 (VGD40.100 - 4") | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN100 | 205 | 330 | 1135 | 1380 x 430 x 710 | 45 |
| 19990794 (VGD40.125 - 5") | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN125 | 210 | 350 | 1285 | 1580 x 430 x 740 | 83 |
| 19990795 (VGD40.150 - 6") | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN150 | 205 | 370 | 1360 | 1580 x 430 x 740 | 95 |
| 19990796 (MBE 100) | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN100 | 205 | 380 | 1135 | 1380 x 430 x 710 | 49 |
| 19990797 (MBE 125) | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN125 | 210 | 380 | 1285 | 1580 x 430 x 740 | 84 |
| 19990798 (MBE 150) | ● | DN125 | ● | ● | ● | ◆ | ● | ● | DN150 | 205 | 380 | 1360 | 1580 x 430 x 740 | 90 |

**CTV** Valve tightness control.
**F** Filter.
**LDU** LDU valve tightness control.
**Pct** Pressure switch for gas control.
**Pmax** Maximum pressure switch.
**Pmc** Minimum and control pressure switch gas leaks.
**Pmin** Minimum pressure switch.
**R** Pressure regulator.
**RF** Pressure regulator with filter.
**RFP** Pressure regulator with filter for pilot gas train.
**RM** Manual flow rate regulator.
**RP** Pneumatic regualtor.
**VF** Regulator throttle valve.
**VL** Operating valve.
**VL2** Two-stage operating valve.
**VLP** Operating pilot valve.
**VLR** Operating valve with pressure regulator.
**VP** Pilot valve.
**VPS** VPS valve tightness control.
**VS** Safety valve.
**VSP** Safety pilot valve.
**Ø** Gas train diameter.
**Ø1** Main gas train diameter.
**Ø2** Pilot gas train diameter.

● As Standard.
▲ As standard for burners with an output of more than 1200 kW, on request for burners with an output of less than 1200 kW.
■ On request.
◆ Mounted on burner.

Energy for People

www.baltur.com

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**Quality System Certified**
**UNI-EN ISO 9001 I.C.I.M. n° 202**