



baltur **75** 
Energy for People 1950 - 2025



TBML 80 MC



TBML 80 ME



TBML 90 P

TBML 80 MC

TBML 80 ME

TBML 90 P

Alternating natural gas/light oil burner according to european regulation EN676 and EN267. Operation:

two-stage

Alternating natural gas/light oil burner according to european regulation EN676 and EN267. Two-stage progressive operation on gas, two-stage on light oil

mechanical two-stage progressive/two-stage

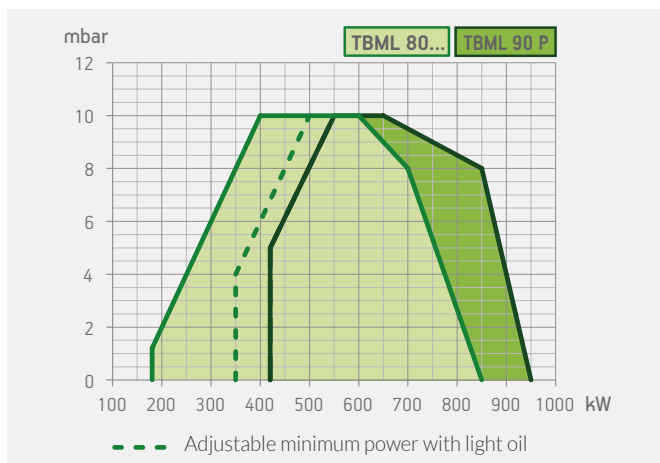
Alternating natural gas/light oil burner according to european regulation EN676 and EN267. Modulating operation on gas, two-stage on light oil

electronic modulation/two-stage

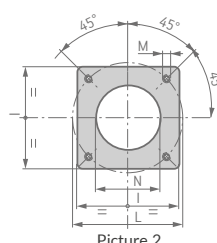
| | TBML 80 MC | TBML 80 ME | TBML 90 P |
|--|----------------|---------------------|----------------|
| P.I.D. controller and signal receiver (0÷10V / 4÷20 mA) integrated in burner control panel | ○ | ● | |
| Modulation ratio: | 1:4 | 1:4 | |
| Burner with Low NOx and CO emissions on gas according to European standard EN676: | class 3 | class 3 | class 2 |
| Burner with Low NOx and CO emissions on light oil according to European standard EN267: | class 2 | class 2 | class 2 |
| Adjusting the combustion head | ● | ● | ● |
| Maintenance facilitated by the possibility of removing the mixing unit and combustion head without having to remove the burner from the boiler | ● | ● | ● |
| High ventilation efficiency, low electrical input, low noise | ● | ● | ● |
| Sliding boiler coupling flange to adapt the blast-pipe to the various types of boilers | ● | ● | ● |
| 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 | mechanical cam |
| Fully closing air damper on shutdown to avoid loss of heat through the chimney | ● | ● | ● |
| Combustion air intake designed to achieve optimum linearity of the air gate opening | ● | ● | ● |
| 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 | up | up |
| Pump connected to fan motor through electromagnetic clutch | ● | ● | ● |
| Fuel supply circuit made of gear pump with pressure adjustment, shut-off valves and safety valve | ● | ● | ● |
| Fuel switch device: | manual | manual | manual |
| Flame detection by UV photocell | ● | ● | ● |
| 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: | IP40 | IP40 | IP40 |

LEGEND:

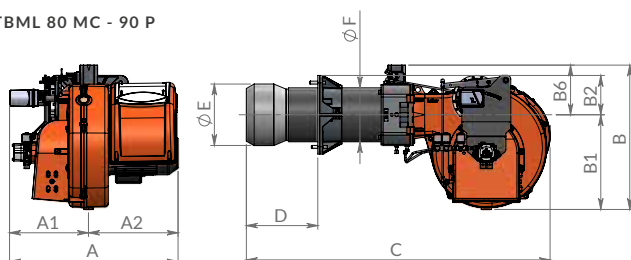
○ Optional, ● As standard



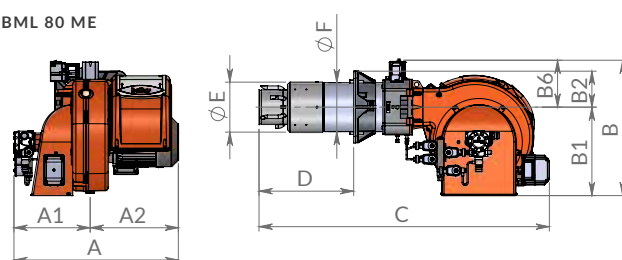
| Model | Size of packaging | | | Weight kg |
|------------|-------------------|-----|-----|--------------|
| | L | P | H | |
| TBML 80 MC | 1070 | 800 | 700 | 88 |
| TBML 80 ME | 1070 | 800 | 700 | 88 |
| TBML 90 P | 1070 | 800 | 700 | 87 |



TBML 80 MC - 90 P



TBML 80 ME



| Model | A mm | A1 mm | A2 mm | B mm | B1 mm | B2 mm | B6 mm | C mm | D mm | E mm | F mm | I mm | L mm | M | N mm | Pic. |
|------------|---------|----------|----------|---------|----------|----------|----------|---------|-----------|---------|---------|---------|-----------|-----|---------|------|
| TBML 80 MC | 700 | 330 | 370 | 380 | 380 | 200 | 200 | 1230 | 270 ÷ 440 | 180 | 178 | 280 | 250 ÷ 325 | M12 | 190 | 2 |
| TBML 80 ME | 700 | 330 | 370 | 380 | 380 | 200 | 200 | 1250 | 270 ÷ 440 | 180 | 178 | 280 | 250 ÷ 325 | M12 | 190 | 2 |
| TBML 90 P | 700 | 330 | 370 | 380 | 380 | 200 | 200 | 1250 | 175 ÷ 400 | 180 | 178 | 280 | 250 ÷ 325 | M12 | 190 | 2 |

| | Emissions class | Thermal output kW | Model | Part no. | Max visc. °E at 20°C | Electrical supply | Motor kW | Note |
|-----------------|-----------------|-------------------|-------------------|-----------------|----------------------|-------------------|----------|------|
| Frequency 50 Hz | | | | | | | | |
| | see page 196 | 180(350)* ÷ 850 | TBML 80 MC | 56490010 | 1,5 | 3N AC 50Hz 400V | 1,1 | 4) |
| | see page 196 | 180(350)* ÷ 850 | TBML 80 ME | 56500010 | 1,5 | 3N AC 50Hz 400V | 1,1 | 4) |
| | class 2 | 420÷950 | TBML 90 P | 56510010 | 1,5 | 3N AC 50Hz 400V | 1,1 | 4) |
| Frequency 60 Hz | | | | | | | | |
| | see page 196 | 180(350)* ÷ 850 | TBML 80 MC | 56495410 | 1,5 | 3N AC 60Hz 380V | 1,1 | 4) |
| | see page 196 | 180(350)* ÷ 850 | TBML 80 ME | 56505410 | 1,5 | 3N AC 60Hz 380V | 1,1 | 4) |
| | class 2 | 420÷950 | TBML 90 P | 56515410 | 1,5 | 3N AC 60Hz 380V | 1,1 | 4) |

TO COMPLETE THE BURNER

DESCRIPTION

TBML 80 ME: modulating probe for LCM 100 (see page 6)

MODULATING MODE

DESCRIPTION

TBML 80 MC: modulation kit 98000057

TBML 80 MC: modulating probe (see page 6)

NOTE

4 Equipped with automatic air closure device.

*) Min thermal capacity with light oil operation.

Net calorific value:

Natural gas: Hi = 35,80 MJ/m³ = 8550 kcal/m³, at reference conditions of 0°C, 1013mbar.

LPG: Hi = 92 MJ/m³ = 22000 kcal/m³, at reference conditions 0°C, 1013mbar.

Light oil: Hi = 42,70 MJ/kg = 10200 kcal/kg.

For different type of gas and pressure values, please get in contact with our commercial department.

ACCESSORIES AVAILABLE ON REQUEST

DESCRIPTION

TBML 90 P: line filter 3/8" 98000370

Soundproof burner cover (see page 11) 97980053

BURNER ACCESSORIES

TBML 80 MC: line filter, flex hoses, nozzles, boiler coupling kit, plug for wiring

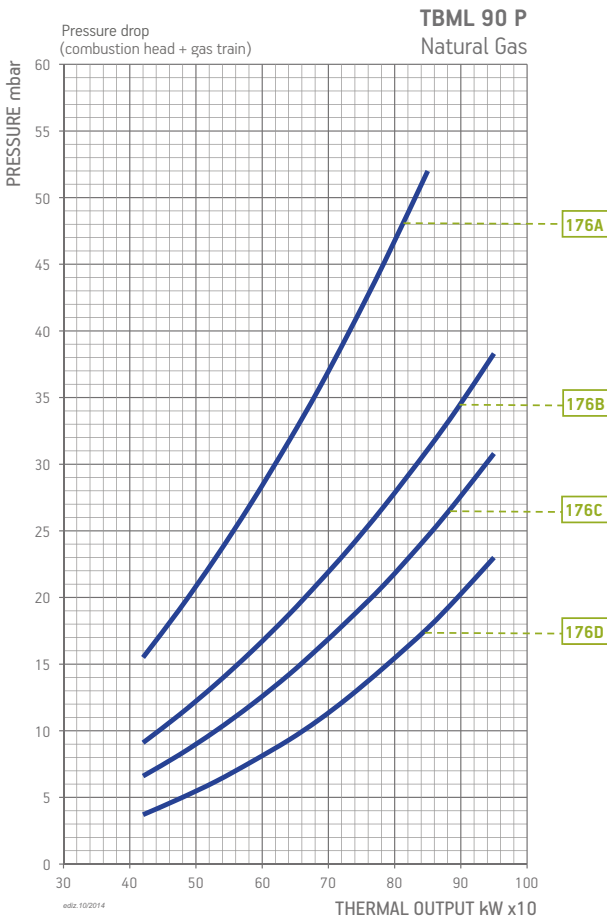
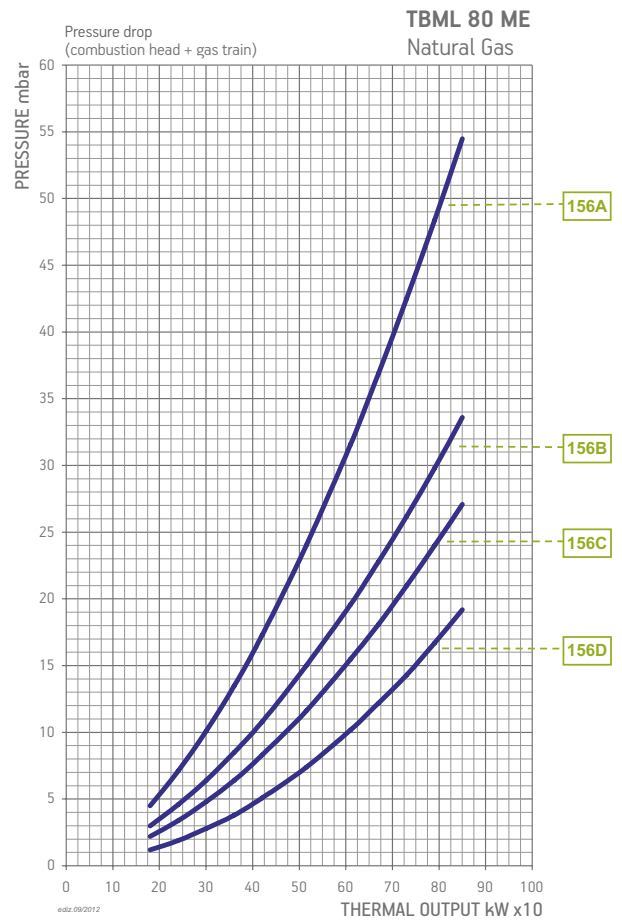
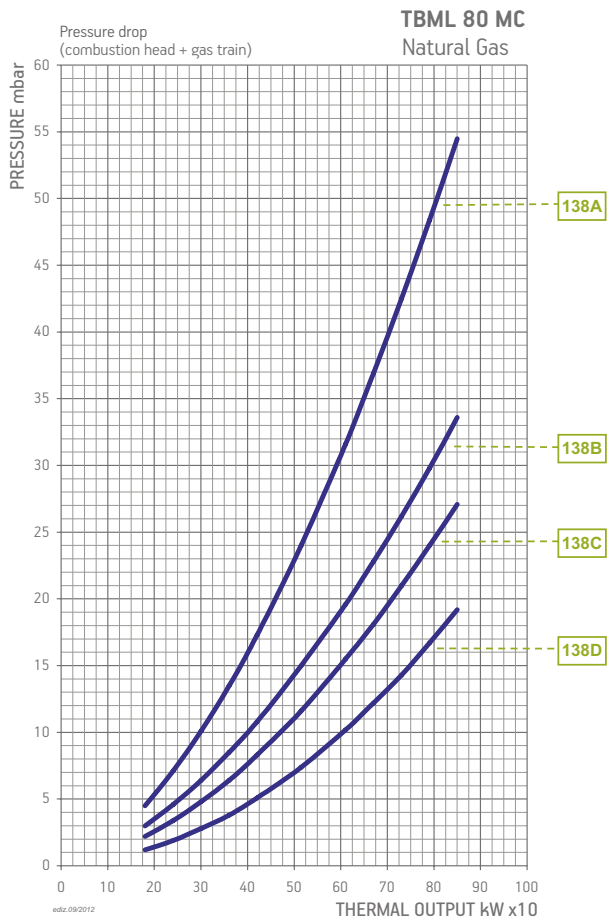
TBML 80 ME: line filter, flex hoses, nozzles, boiler coupling kit.

TBML 90 P: flex hoses, nozzles, boiler coupling kit, plug for wiring

DUAL FUEL
GAS/LIGHT OIL BURNERS

BURNER/GAS TRAIN MATCH

DUAL FUEL
GAS/LIGHT OIL BURNERS



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.



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 ÷ 10V / 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.

RETURN NOZZLES

Nozzle with fuel return for diesel and mixed series two-stage progressive / modulating and modulating burners. This kind of nozzle, while keeping the pump pressure constant, varies the amount of

fuel supplied according to the return pressure of the nozzle. To be ordered together with the burner when placing the order according to the power required by the application.

Nozzles for light oil (ratio 1÷3) excluded burners: TBML 800

| Part no. | Rated flow-rate kg/h | Flow-rate angle | Part no. | Rated flow-rate kg/h | Flow-rate angle |
|----------|----------------------|-----------------|----------|----------------------|-----------------|
| 98000201 | 50 | 45° | 98000218 | 400 | 45° |
| 98000202 | 60 | 45° | 98000219 | 425 | 45° |
| 98000203 | 70 | 45° | 98000220 | 450 | 45° |
| 98000204 | 80 | 45° | 98000221 | 475 | 45° |
| 98000205 | 90 | 45° | 98000222 | 500 | 45° |
| 98000206 | 100 | 45° | 98000223 | 525 | 45° |
| 98000207 | 125 | 45° | 98000224 | 550 | 45° |
| 98000208 | 150 | 45° | 98000225 | 575 | 45° |
| 98000209 | 175 | 45° | 98000226 | 600 | 45° |
| 98000210 | 200 | 45° | 98000227 | 650 | 45° |
| 98000211 | 225 | 45° | 98000228 | 700 | 45° |
| 98000212 | 250 | 45° | 98000229 | 750 | 45° |
| 98000213 | 275 | 45° | 98000230 | 800 | 45° |
| 98000214 | 300 | 45° | 98000231 | 850 | 45° |
| 98000215 | 325 | 45° | 98000232 | 900 | 45° |
| 98000216 | 350 | 45° | 98000233 | 1000 | 45° |
| 98000217 | 375 | 45° | | | |



Nozzles for light oil (ratio 1÷4) for burners TBML 450÷900 - TBL 450÷750 - TBL 1000

| Part no. | Rated flow-rate kg/h | Flow-rate angle | Part no. | Rated flow-rate kg/h | Flow-rate angle |
|----------|----------------------|-----------------|----------|----------------------|-----------------|
| 98000264 | 200 | 45° | 98000277 | 550 | 45° |
| 98000265 | 225 | 45° | 98000278 | 600 | 45° |
| 98000266 | 250 | 45° | 98000279 | 650 | 45° |
| 98000267 | 275 | 45° | 98000271 | 700 | 45° |
| 98000268 | 300 | 45° | 98000273 | 750 | 45° |
| 98000269 | 330 | 45° | 98000276 | 800 | 45° |
| 98000270 | 360 | 45° | 98000286 | 800 | 50° |
| 98000272 | 400 | 45° | 98000287 | 850 | 50° |
| 98000274 | 450 | 45° | 98000288 | 900 | 50° |
| 98000275 | 500 | 45° | | | |



Nozzles for light oil (ratio 1÷5) for burners TBML 800 - TBL 1000

| Part no. | Rated flow-rate kg/h | Flow-rate angle | Part no. | Rated flow-rate kg/h | Flow-rate angle |
|----------|----------------------|-----------------|----------|----------------------|-----------------|
| 98000238 | 200 | 45° | 98000249 | 475 | 45° |
| 98000239 | 225 | 45° | 98000250 | 500 | 45° |
| 98000240 | 250 | 45° | 98000251 | 525 | 45° |
| 98000241 | 275 | 45° | 98000252 | 550 | 45° |
| 98000242 | 300 | 45° | 98000253 | 575 | 45° |
| 98000243 | 325 | 45° | 98000254 | 600 | 45° |
| 98000244 | 350 | 45° | 98000255 | 650 | 45° |
| 98000245 | 375 | 45° | 98000256 | 700 | 45° |
| 98000246 | 400 | 45° | 98000257 | 750 | 45° |
| 98000247 | 425 | 45° | 98000258 | 800 | 45° |
| 98000248 | 450 | 45° | 98000259 | 850 | 45° |
| | | | 98000260 | 900 | 45° |

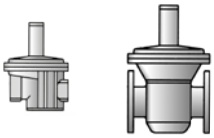


Nozzles for heavy oil (ratio 1÷5) - Type W4

| Part no. | Rated flow-rate kg/h | Flow-rate angle | Part no. | Rated flow-rate kg/h | Flow-rate angle |
|----------|----------------------|-----------------|----------|----------------------|-----------------|
| 98000500 | 300 | 45° | 98000508 | 500 | 45° |
| 98000501 | 325 | 45° | 98000509 | 525 | 45° |
| 98000502 | 350 | 45° | 98000510 | 550 | 45° |
| 98000503 | 375 | 45° | 98000511 | 600 | 45° |
| 98000504 | 400 | 45° | 98000512 | 650 | 45° |
| 98000505 | 425 | 45° | 98000513 | 700 | 45° |
| 98000506 | 450 | 45° | 98000514 | 750 | 45° |
| 98000507 | 475 | 45° | | | |

Gas pressure regulator with incorporated filter approved CE*

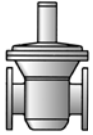
Control closing, pressure taps upstream side - the side valley, safety diaphragm.
Max inlet pressure : 1 bar.



| 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*

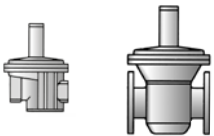
Control closing, pressure taps upstream side - the side valley, safety diaphragm.
Max inlet pressure : 1 bar.



| 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*

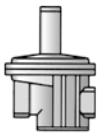
Control closing, pressure taps upstream side - the side valley, safety diaphragm.
Max inlet pressure : 2 bar.



| 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*

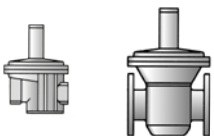
Control closing, pressure taps upstream side - the side valley, safety diaphragm.
Max inlet pressure : 6 bar.



| 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 table below shows the regulation field that must be used, as well as the corresponding spring to replace the standard one with.

ACCESSORIES FOR CONNECTION OF BURNERS TO GAS MAINS

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

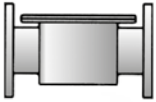
*) of series.

ACCESSORIES FOR CONNECTION OF BURNERS TO GAS MAINS

Gas filters approved CE

With pressure.

Max inlet pressure: 2 bar.

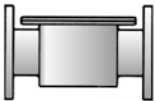


| Part no. | Model | Gas connection |
|----------|-------|----------------|
| 97410001 | BTF | 1/2" FF |
| 97410002 | BTF | 3/4" FF |
| 97410003 | BTF | 1" FF |
| 97410004 | BTF | 1" 1/4 FF |
| 97410005 | BTF | 1" 1/2 FF |
| 97410006 | BTF | 2" FF |
| 97419999 | BTF | DN65 - PN16 |
| 97429999 | BTF |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

Gas filters approved CE

With pressure.

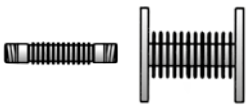
Max inlet pressure: 6 bar.



| 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 |

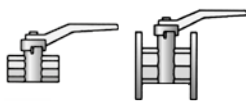
Anti-vibration and compensation joints approved CE

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 |

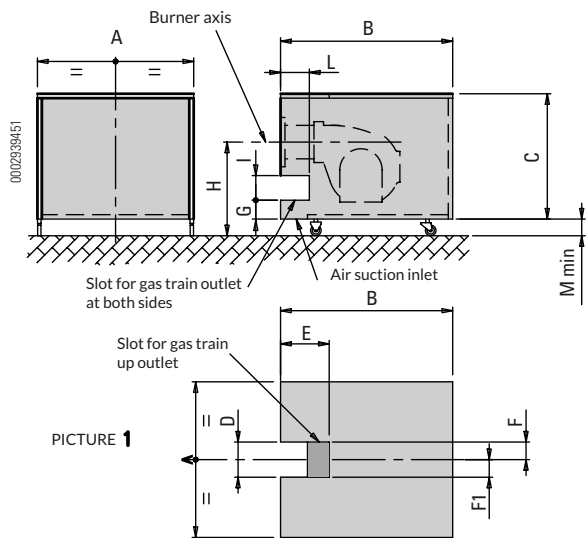
Ball valves approved CE



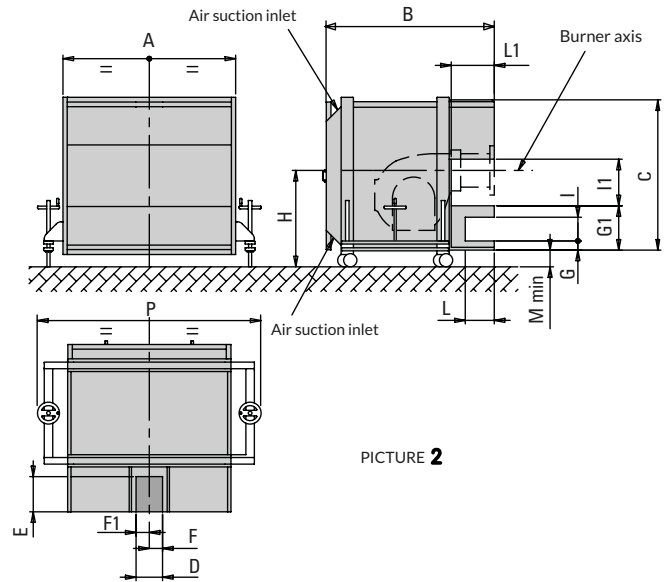
| Part no. | Model | Gas connection |
|----------|-------|----------------|
| 97679999 | BTVS | 3/8" FF |
| 97689999 | BTVS | 1/2" FF |
| 97699999 | BTVS | 3/4" FF |
| 97709999 | BTVS | 1" FF |
| 97719999 | BTVS | 1" 1/4" FF |
| 97729999 | BTVS | 1" 1/2" FF |
| 97739999 | BTVS | 2" FF |
| 97749999 | 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

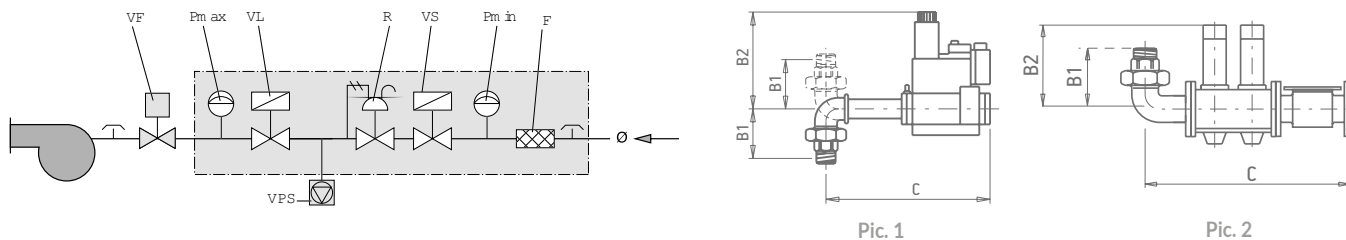
| Model | Sound pressure | Pic. | A | B | C | D | E | F | F1 | G | G1 | H mm | | I | I1 | L | L1 | M min | P |
|-----------|----------------|------|------|------|------|-----|-----|------|-------|------|-----|------|------|-----|-----|-----|-----|-------|------|
| | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | min | max | 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's customer responsibility to check the correct matching of soundproof according to the height of the boiler.

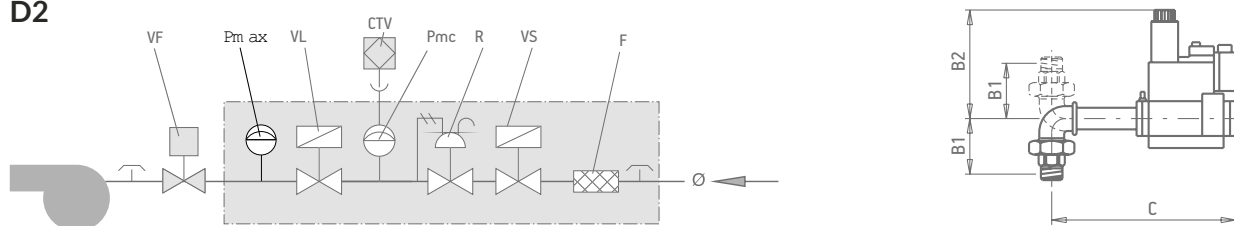
GAS TRAIN STRUCTURE AND COMPOSITION

B7



| Gas train Part no. | Position | | | | | | | | | Gas train dimensions mm | | | Size of packaging mm | Weight | Pic.. |
|----------------------|----------|------|------|---|----|----|-----|----|-------|-------------------------|-----|------|----------------------|--------|-------|
| | F | Pmax | Pmin | R | VF | VL | VPS | VS | Ø | B1 | B2 | C | L x P x H | kg | |
| 19990712 (MB...412) | ● | ● | ● | ● | ◆ | ● | ▲ | ● | 1"1/4 | 107 | 160 | 490 | 400x300x280 | 8 | 1 |
| 19990713 (MB...415) | ● | ● | ● | ● | ◆ | ● | ▲ | ● | 1"1/2 | 115 | 170 | 595 | 460X250X460 | 11 | 1 |
| 19990714 (MB...415) | ● | ● | ● | ● | ◆ | ● | ▲ | ● | 1"1/2 | 115 | 170 | 595 | 460X250X460 | 11 | 1 |
| 19990715 (MB...420) | ● | ● | ● | ● | ◆ | ● | ▲ | ● | 2" | 128 | 217 | 600 | 460X250X460 | 13 | 1 |
| 19990716 (MB...420) | ● | ● | ● | ● | ◆ | ● | ● | ● | 2" | 128 | 217 | 600 | 460X250X460 | 13 | 1 |
| 19990717 (VGD20.503) | ● | ● | ● | ● | ◆ | ● | ● | ● | 2" | 100 | 280 | 880 | 990X300X500 | 15 | 2 |
| 19990718 (VGD40.065) | ● | ● | ● | ● | ◆ | ● | ● | ● | DN65 | 100 | 305 | 1120 | 1380X430X700 | 26 | 2 |
| 19990719 (VGD40.080) | ● | ● | ● | ● | ◆ | ● | ● | ● | DN80 | 100 | 315 | 1190 | 1380X430X700 | 28 | 2 |

D2



| Gas train Part no. | Position | | | | | | | | | Gas train dimensions mm | | | Size of packaging mm | Weight |
|----------------------|----------|---|------|-----|---|------|----|----|-------|-------------------------|-----|------|----------------------|--------|
| | CTV | F | Pmax | Pmc | R | VF | VL | VS | Ø | B1 | B2 | C | L x P x H | kg |
| 19990524 (VGD20.503) | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 285 | 890 | 990 x 300 x 500 | 14 |
| 19990525 (VGD40.065) | ● | ● | ● | ● | ● | ◆ | ● | ● | DN65 | 114 | 320 | 1120 | 1380 x 430 x 700 | 26 |
| 19990526 (VGD40.080) | ● | ● | ● | ● | ● | ◆ | ● | ● | DN80 | 114 | 325 | 1175 | 1380 x 430 x 700 | 28 |
| 19990555 (MB...407) | ● | ● | ● | ● | ● | ◆ | ● | ● | 3/4" | 72 | 140 | 350 | 300 x 210 x 300 | 5 |
| 19990556 (MB...410) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/4 | 95 | 160 | 390 | 300 x 210 x 300 | 8 |
| 19990557 (MB...412) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/4 | 95 | 160 | 390 | 300 x 210 x 300 | 8 |
| 19990558 (MB...415) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/2 | 103 | 170 | 490 | 460 x 250 x 460 | 11 |
| 19990559 (MB...420) | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 220 | 520 | 520 x 410 x 410 | 13 |
| 19990561 (MB...415) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/2 | 103 | 170 | 490 | 520 x 410 x 410 | 11 |
| 19990562 (MB...420) | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 220 | 520 | 520 x 410 x 410 | 13 |
| 19990573 (MB...407) | ● | ● | ● | ● | ● | 3/4" | ● | ● | 3/4" | 72 | 160 | 305 | 400 x 300 x 280 | 12 |
| 19990574 (MB...410) | ● | ● | ● | ● | ● | 3/4" | ● | ● | 1"1/4 | 95 | 160 | 355 | 400 x 300 x 280 | 15 |
| 19990575 (MB...412) | ● | ● | ● | ● | ● | 3/4" | ● | ● | 1"1/4 | 95 | 160 | 355 | 400 x 300 x 280 | 15 |
| 19990576 (MB...415) | ● | ● | ● | ● | ● | 3/4" | ● | ● | 1"1/2 | 103 | 170 | 445 | 520 x 410 x 410 | 18 |
| 19990577 (VGD40.065) | ● | ● | ● | ● | ● | ◆ | ● | ● | DN65 | 125 | 320 | 760 | 1030 x 430 x 650 | 50 |
| 19990578 (VGD40.080) | ● | ● | ● | ● | ● | ◆ | ● | ● | DN80 | 175 | 325 | 860 | 1030 x 430 x 650 | 57 |
| 19990748 (MB...412) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/4 | 95 | 160 | 410 | 520 x 410 x 410 | 8 |
| 19990749 (MB...415) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/2 | 103 | 170 | 500 | 520 x 410 x 410 | 11 |
| 19990750 (MB...420) | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 220 | 500 | 520 x 410 x 410 | 13 |
| 19990754 (MB...415) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/2 | 103 | 170 | 500 | 520 x 410 x 410 | 11 |
| 19990755 (MB...420) | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 220 | 500 | 520 x 410 x 410 | 13 |

- 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.

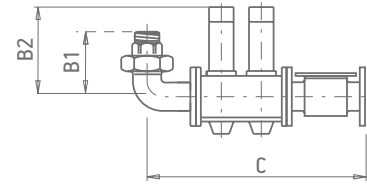
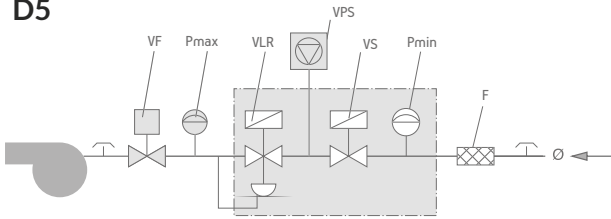
- RFP Pressure regulator with filter for pilot gas train.
- RM Manual flow rate regulator.
- RP Pneumatic regulator.
- VF Regulator throttle valve.
- VL Operating valve.
- VL2 Two-stage operating valve.
- VLP Operating pilot valve.
- VLR Operating valve with pressure regulator.

- 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.

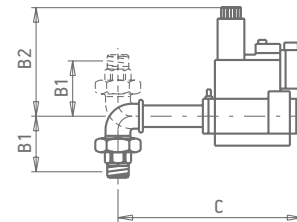
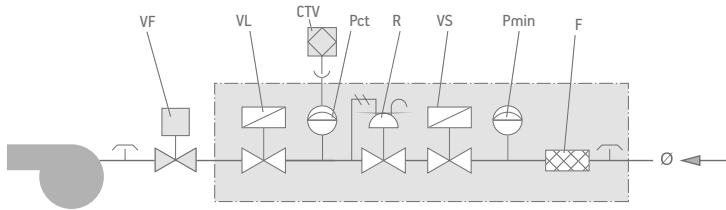
GAS TRAIN STRUCTURE AND COMPOSITION

D5



| Gas train Part no. | Position | | | | | | | Gas train dimensions mm | | | Size of packaging mm | Weight kg |
|--------------------|----------|---|------|----|-----|----|------|-------------------------|-----|------|----------------------|-----------|
| | Pmax | F | Pmin | VF | VLR | VS | Ø | B1 | B2 | C | L x P x H | |
| 19990720 (MBE 050) | ● | ● | ● | ◆ | ● | ● | 2" | 100 | 311 | 880 | 990X300X500 | 19,5 |
| 19990721 (MBE 065) | ● | ● | ● | ◆ | ● | ● | DN65 | 100 | 381 | 1120 | 1380X430X700 | 45 |
| 19990722 (MBE 080) | ● | ● | ● | ◆ | ● | ● | DN80 | 100 | 381 | 1190 | 1380X430X700 | 50 |
| 19990773 (MBE 050) | ● | ● | ● | ◆ | ● | ● | 2" | 100 | 311 | 880 | 990X300X500 | 19,5 |
| 19990774 (MBE 065) | ● | ● | ● | ◆ | ● | ● | DN65 | 100 | 381 | 1120 | 1380X430X700 | 45 |
| 19990775 (MBE 080) | ● | ● | ● | ◆ | ● | ● | DN80 | 100 | 381 | 1190 | 1380X430X700 | 50 |
| 19990786 (MBE 050) | ● | ● | ● | ◆ | ● | ● | 2" | 100 | 311 | 880 | 990X300X500 | 19,5 |
| 19990787 (MBE 065) | ● | ● | ● | ◆ | ● | ● | DN65 | 100 | 381 | 1120 | 1380X430X700 | 45 |
| 19990788 (MBE 080) | ● | ● | ● | ◆ | ● | ● | DN80 | 100 | 381 | 1190 | 1380X430X700 | 50 |

D7



| Gas train Part no. | Position | | | | | | | | | Gas train dimensions mm | | | Size of packaging mm | Weight kg |
|------------------------------|----------|---|-----|------|---|----|----|----|-------|-------------------------|-----|------|----------------------|-----------|
| | CTV | F | Pct | Pmin | R | VF | VL | VS | Ø | B1 | B2 | C | L x P x H | |
| 19990580 (MB...410 - 1") | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/4 | 95 | 160 | 390 | 300 x 210 x 300 | 8 |
| 19990581 (MB...412 - 1"1/4) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/4 | 95 | 160 | 390 | 300 x 210 x 300 | 8 |
| 19990582 (MB...415 - 1"1/2) | ● | ● | ● | ● | ● | ◆ | ● | ● | 1"1/2 | 103 | 170 | 490 | 460 x 250 x 460 | 11 |
| 19990583 (MB...420 - 2") | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 220 | 520 | 520 x 410 x 410 | 13 |
| 19990584 (VGD20.503 - 2") | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 285 | 890 | 990 x 300 x 500 | 15 |
| 19990585 (VGD40.065 - 2"1/2) | ● | ● | ● | ● | ● | ◆ | ● | ● | DN65 | 114 | 320 | 1120 | 1380 x 430 x 700 | 26 |
| 19990586 (VGD40.080 - 3") | ● | ● | ● | ● | ● | ◆ | ● | ● | DN80 | 114 | 325 | 1190 | 1380 x 430 x 700 | 28 |
| 19990624 (MB...420 - 2") | ● | ● | ● | ● | ● | ◆ | ● | ● | 2" | 114 | 220 | 520 | 520 x 410 x 410 | 13 |

- 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 regulator.
- 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.



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www.baltur.com
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info@baltur.it

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

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