

CONTENTS

Gas Pressure Regulation for Home Use	2-3
Gas Pressure Regulators	4-5
House Reducing Stations for Home Use	6
Small Reducing Stations	7
Safety Stop Valves	8
Gas Pressure Regulators	9-10
Safety Blow Off Valves	11
Silencers	12
MONOBLOCK	13-14
Gas Supply Systems	15
Compact Reducing Stations	16-17
Odorizing Units	18
Gas Filters	19-20
Heat Exchangers	21
Boilers	22

Gas Pressure Regulators for Home Use

KHS-2



This type of regulator is ideally suited for family homes and small gas consumers at community level. It is fitted with a safety stop valve, safety blow-off valve and upstream gas filter. Its design permits corner installation as well as the more commonly used straight passage installation.

Max. inlet pressure:	10 bar
Nom. outlet pressure:	20-100 mbar
Max. flow rate (natural gas):	15 Nm ³ /h
Connection:	G 5/4 “
Body material:	cast aluminum

KHS PB-12-30



Two-stage gas pressure regulator for LPG/ natural gas, with safety stops valve, safety blow-off valve and gas filter. Can be fitted directly on PB tank.

Max. inlet pressure:	25 bar
Nom. outlet pressure:	30 mbar
Max. flow rate (natural gas):	30 Nm ³ /h
Connection:	POL thread G 5/4 “
Body material:	steel/ cast aluminum

Gas Pressure Regulators for Home Use

KMS -1-25A



Single-stage pressure regulator for single-branch gas flow meters of type G4-G6. Includes pressure cut-off for supply interruption protection, gas filter and rupturing diagram.

Max. inlet pressure:	100 bar
Nom. outlet pressure:	22-26 mbar
Max. flow rate (natural gas):	10 Nm ³ /h
Connection:	G 5/4 "
Body material:	cast aluminum

Gas Pressure Regulators

KHS-40



Single-stage gas pressure regulator with safety stop valve/ safety blow-off valve for internal outlet pressure pulse registration.

Max. inlet pressure:	10 bar
Nom. outlet pressure:	28-100 mbar
Max. flow rate (natural gas):	40 Nm ³ /h
Connection:	G 5/4 "
Body material:	cast aluminum

KHS-100



Single-stage gas pressure regulator with safety stop valve/ safety blow-off valve for use in small-scale reducing stations.

Max. inlet pressure:	10 bar
Nom. outlet pressure:	28-100 mbar
Max. flow rate (natural gas):	100 Nm ³ /h
Connection:	G 5/4 "
Body material:	cast aluminum

Gas Pressure Regulators

K-200



The single-stage gas pressure regulator is fitted with a safety stop valve and safety blow-off valve. While small in size, it can handle considerable flow rate.

Max. inlet pressure:	10 bar
Nom. outlet pressure:	28-100 mbar
Max. flow rate (natural gas):	200 Nm ³ /h
Connection:	G2" / G2"
Body material:	aluminum

KKS-1-25A



This type is primarily used for fine-tuned regulation of gas burners of 100-350 kW in boiler houses.

Max. inlet pressure:	100 bar
Nom. outlet pressure:	20-30 mbar
Max. flow rate (natural gas):	40 Nm ³ /h
Connection:	G 5/4 " / G 5/4 "
Body material:	aluminum

House Reducing Stations for Home Use

FS-01



FS-01 underground stations are an excellent alternative option wherever visible boxes are undesirable for aesthetic or safety reasons.

Gas pressure regulator:	KHS-2
Max. flow rate (natural gas):	15 Nm ³ /h
Inlet:	DN 20/ DN 32 KPE
Outlet:	DN 32 KPE
Material:	Corrosion-proof sheet steel

KT-100



KT-100 stations are small boxes designed primarily for use at small companies and large housing blocks (front yard installation).

Gas pressure regulator:	KHS-100
Max. flow rate (natural gas):	100 Nm ³ /h
Connection (inlet/outlet):	DN 32/ DN 63 KPE
Material:	powder-coated steel sheet

Small Reducing Stations

KSZL-100



KSZL-100 stations are modeled along the lines of KT-100, but designed for external wall mounting.

- Gas pressure regulator: KHS-100
- Max. flow rate (natural gas): 100 Nm³/h
- Connection (input/output): R1”/ DN 50
- Material: powder-coated steel sheet

KANIZSA



The cabinets, which are optionally fitted with a gas flow meter, have been developed for companies and municipal buildings. Stations which include a meter can be provided with a meter bypass. The metering system is suitable for billing purposes.

- Gas pressure regulator: KHS-100, KSH-40
- Gas flow meter: G10-G160 with diaphragm, rotary position or turbine flow meter with corrector.
- Max. flow rate (natural gas): 200 Nm³/h
- Connection (input/output): R1”/ R5/4”/ DN40÷DN80
- Material: powder-coated steel sheet

Safety Stop Valves

G 31



DIN-DVGW approved safety stop valve for monitoring and automatic cut-off of the gas flow when the pressure falls below and/or exceeds the set values.

Cast steel design: up to widths of DN 100; welded steel design as of DN 150-300.

Maximum stress: ANSI 600

Adjust. range: lower setting range 1.01 ÷ 72 bar
upper setting range 1.02 ÷ 90 bar

Nominal widths: DN 25 ÷ DN 300

G 42



DIN-DVGW approved safety stop device, wafer-type design; for installation into flow and return lines of the hot water circuit of gas preheaters to protect the boiler plant.

Max. operating pressure: ÷ 100 bar

Adjust. range: 1.9 ÷ 70.0 bar

Nominal widths: DN 25, DN 50, DN 80, DN 100,
DN 150, DN 200

Gas Pressure Regulators

KS-2 család



The KS-2 is designed for stations up to PN 16, to regulate the gas supply of small towns, municipal buildings and industrial companies operating in range of 100-25,000Nm³/h.

A single stage regulator, it is fitted with an integrated safety stop valve.

Max. inlet pressure: 16 bar

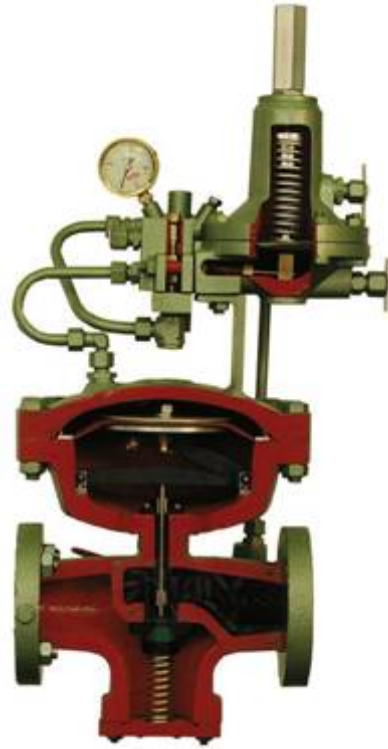
Nom. outlet pressure: 25 mbar ÷ 10 bar

Max. flow rate (natural gas): 25.000 Nm³/h

Connecting flanges: DN 40/50, DN 50/80, DN 80/100, DN100/150

Body material: steel

G 52



DIN-DVGW-approved, indirectly controlled gas pressure regulator that draws additional energy from the controlled system. Its special leverage permits single-stage reduction from 80 bar to 20 mbar.

Max. inlet pressure: up to PN 80

Outlet pressure: 0.01 ÷ 45 bar

Nominal widths: DN 25, DN 50, DN 80, DN 100, DN 150, DN 200, DN 250, DN 300.

Body material: steel

Gas Pressure Regulators

G 55



DIN-DVGW approved, indirectly controlled axial gas pressure regulator with additional energy from the controlled system. If required, the regulators are available with output silencer and extended output module.

Max. stress: ANSI 600

Control range: 0.6 ÷ 45 bar

Nominal widths: DN 25, DN 50, DN 80, DN 100, DN 150

G 57.40



DIN-DVGW approved, indirectly controlled gas pressure regulator with built-in safety stop valve. Additional energy from the controlled system. The regulators include silencers and a multi-stage reducer.

Max. stress: ANSI 600

Control range: 0.02 ÷ 45 bar

Adjusting range for safety stop valve:
 lower setting range: 0.01 ÷ 25 bar
 upper setting range: 0.02 ÷ 90 bar

Nominal widths: DN 25/25, DN 50/50, DN 80/150,
 DN 100/150, DN 150/200, DN 300, DN 400

Safety Blow Off Valves

KBE



Used to divert excess pressure in gas pressure regulators and pressure vessels. Spring-loaded design with low pressure increase.

Pressure rating:	10 bar
Adjusting range:	0.03 ÷ 1 bar
Medium temperature:	0 ÷ +30 °C
Nominal widths:	DN 25 ÷ DN 50

KBD



Used to protect pipeline systems and pressure vessels against an excessive rise in pressure. Spring-loaded design.

Pressure rating:	25 bar
Adjusting range:	0.65 ÷ 16 bar
Medium temperature:	0 ÷ +30 °C
Nominal widths:	DN 25 ÷ DN 65

Silencers

SD



Absorption silencers are used to abate the noise caused by the pressure reduction process. Optimum efficiency is guaranteed by their exact design and their installation downstream of the control valve.

Flow rate: $\div 400.000 \text{ Nm}^3/\text{h}$
Pressure rate: $\div 40 \text{ bar}$
Sound absorption: 25 dB(A)

LN 40

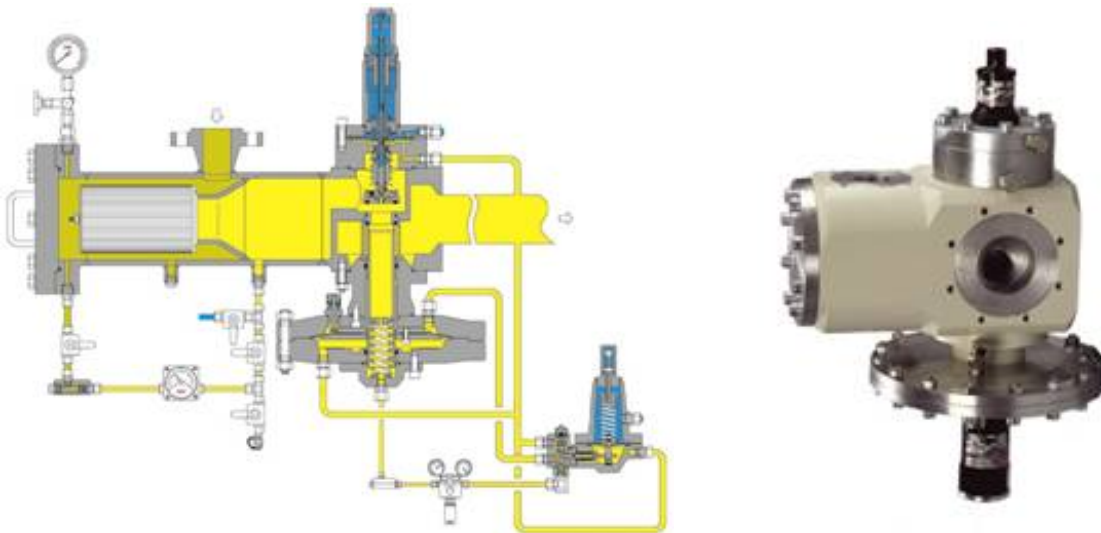


These pipe construction elements control expansion downstream of the pressure regulator, a process for which the correct aperture angle and proper design are of vital importance.

Flow rate: $\div 150.000 \text{ Nm}^3/\text{h}$
Pressure rate: $\div 40 \text{ bar}$
Sound absorption: 12 dB(A)

MONOBLOCK

MONOBLOCK MBN



MONOBLOCK MBN is based on HEAT's modular design. The ideal solution in terms of compactness and efficiency for pressure reduction from 16 mar to as low as 20 mbar. The unit is excellently suited for industrial as well as home use, in cabinets or as open installation.

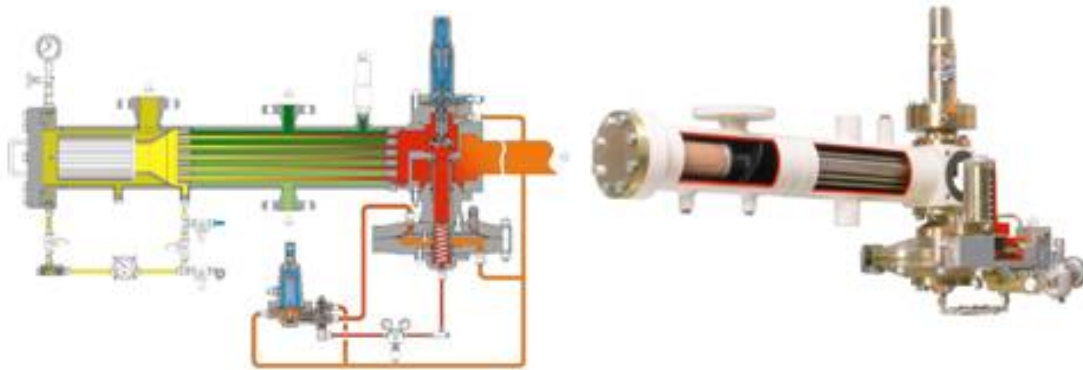
the MONOBLOCK MBN consists of:

- Cartridge filter with cellulose element
- Safety stop valve with upper and lower trigger
- Gas pressure regulator with integrated silencer

Max. inlet pressure:	16 bar
Output pressure:	0.02 ÷ 10 bar
Nominal widths:	DN 50/80, DN 80/150
Flow rate:	5,400 Nm ³ /h

MONOBLOCK

MONOBLOCK MBM



MONOBLOCK MBM is an advanced modular design, built to meet the most stringent requirements in terms of reliability, service and ease operation, while at the same time requiring low investment and maintenance costs. The system offers compact high pressure reducing stations with the input pressures exceeding 16 bar. As a result of the system's ideal fluidic design, its maximum sound level is below that of traditional devices.

Maximum stress:	PN 70, ANSI 600
Output pressure:	0.02 ÷ 45 bar
Flow rate:	1,000 Nm ³ /h, 2,500 Nm ³ /h, 5.000 Nm ³ /h, 12,000 Nm ³ /h

Gas Supply Systems

KBO-2



KBO-2 is used in the gas supply to industrial and community networks, to farms and municipal buildings. The two-legged, meterless unit is housed in a steel cabinet and heated by the time-tested KF-2 room heating system.

Max. inlet pressure:	16 bar
Nom. outlet pressure:	0,02 ÷ 10 bar
Max. flow rate (natural gas):	25,000 Nm ³ /h
Flange:	DN 40 ÷ DN 200
Material:	powder-coated sheet steel

KBM – 1



KBM-1 is similar to KBO-2, except that it is fitted with a gas flow meter which can be used for accounting or billing purposes. Because of the meter, its performance is lower than that of KBO-2.

Max. inlet pressure:	16 bar
Nom. outlet pressure:	0,02 ÷ 10 bar
Max. flow rate (natural gas):	17,000 Nm ³ /h
Flange:	DN 40 ÷ DN 200
Material:	powder-coated sheet steel

Compact Reducing Stations

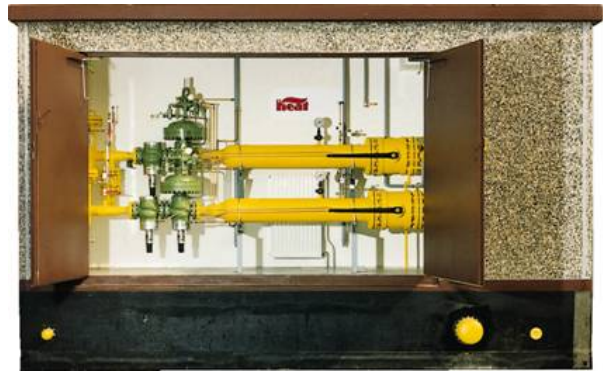
MONOBLOCK MBU



MONOBLOCK MBU is a natural gas pressure reducer suitable for underground laying. Its compact and efficient design is ideally used whenever lack of space, urban planning considerations or protecting against vandalism makes belowground installation advisable.

Max. inlet pressure:	16 bar
Nom. outlet pressure:	20 mbar
Max. flow rate (natural gas):	8,000 Nm ³ /h
Material:	steel/plastic insulated

Concrete container systems



Compact reducer stations will in many cases be suitable for small and medium-sized plants. They are housed in a concrete container or prefab concrete building with all its secondary rooms. Containers may be shipped separately for on-site combination to form a functional unit. The structural walls are made of reinforced concrete and finished at the outside with maintenance-free fair-faced or washed concrete. All assemblies are completed at our works, ready for mounting on a strip footing to be provided on site.

Flow rate:	÷ 50,000 Nm ³ /h
Pressure rating:	÷ 200 bar

Compact Reducing Stations

Aluminum / sheet-steel cabinets



Small reducer stations are usually housed in aluminum cabinets; all secondary rooms, such as central heating room, odorisation room and control unit, may be integrated as required. The cabinet, fitted with all the requisite components, is set on a stable base frame. Its lower weight as compared to a concrete cabinet facilitates shipment and subsequent relocation.

Flow rate: $\div 30,000 \text{ Nm}^3/\text{h}$

Pressure rating: $\div 100 \text{ bar}$

Odorizing Units

Bypass odorizing



Methane, an odorless gas itself, is the main component of natural gas. Odorous substances, however, are added in order to quickly and easily detect leakages, which is of particular importance since gas is supplied to densely populated areas. Bypass odourisation operates on the principle of adding an odorous substance (THT, for instance) to a small portion of the gas flow diverted through a secondary pipe. The odourised gas then flows back to the main gas stream. The flow-dependent differential pressure across a throttle valve determines the quantity of odorous substances added.

Flow rate: $\div 10,000 \text{ Nm}^3/\text{h}$

Pressure rating: 25 bar

Injection odorizing



Mercaptan, a strong odorous substance, is used for odourisation. It is injected with a pump designed for accurate dosing and guarantees reliable odourisation, achieves good mixing and keeps odouriser consumption low. GAZGEP supplies fully assembled odourising systems, complete with a storage tank and fully initial filling.

Flow rate: $\div 1,000,000 \text{ Nm}^3/\text{h}$

Pressure rating: $\div 100 \text{ bar}$

Gas Filters



Series KF (straight)

Produced in large series, the straight-passage gas filters are used in gas supply systems for housing blocks and gas firing plants. They are characterized by their low pressure loss at high flow rates. Type KF-25 is designed as a dirt trap.

Max. pressure rating type KF: 6 bar

Max. pressure rating type KF-25: 16 bar

Separation rate: > 50 µm

Connection type KF (flange): DN 40 ÷ DN 100

Connection type KF-25 (threaded): G1"

Body material: cast aluminium

Series KF-L (corner design)

Corner-type filters are used in gas pressure regulating stations, community pipelines, farming and industrial operations.

Max. pressure rating: 10-64 bar

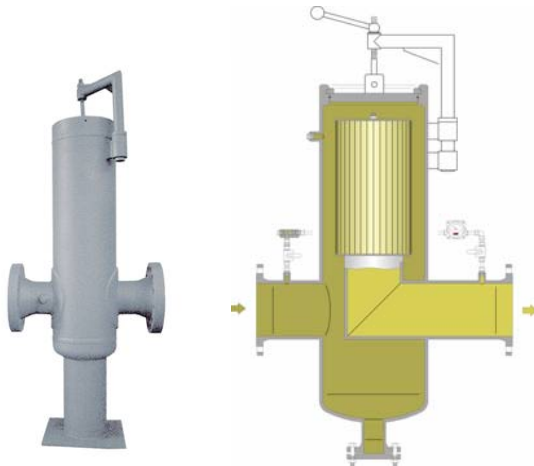
Separation rate: > 45 µm

Connection (flange): DN 25 ÷ DN 100

Body material: steel

Gas Filters

PF



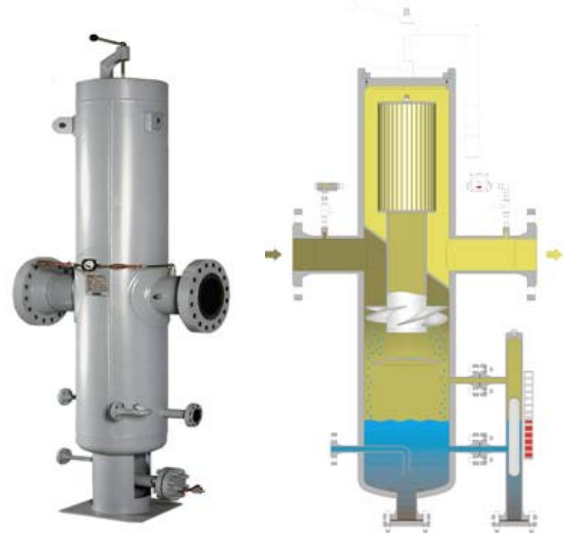
Cartridge fine filters have developed for filtering dust, rust and other solid pollutants from gas and air flows.

Flow rate: $\div 300,000 \text{ Nm}^3/\text{h}$

Pressure rating: $\div 200 \text{ bar}$

Separation rate: $99,9\% > 2 \mu\text{m}$

SNAP



Dust-liquid separators are of the two-stage type, consisting of a vertical stage and filter unit. They include axial cyclones which operate on the centrifugal principle. The standard models are designed for natural gas and acid gases.

Flow rate: $\div 200,000 \text{ Nm}^3/\text{h}$

Pressure rating: $\div 200 \text{ bar}$

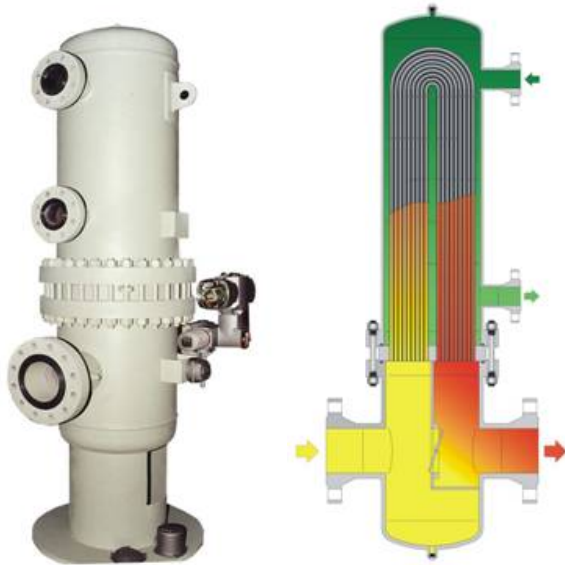
Separation of solids: $> 99,9\% \ 3 \mu\text{m}$

Separation of liquids: $> 99,9\% \ 3 \mu\text{m}$

Effective range: $15 \div 110\%$

Heat Exchangers

WAT-SW

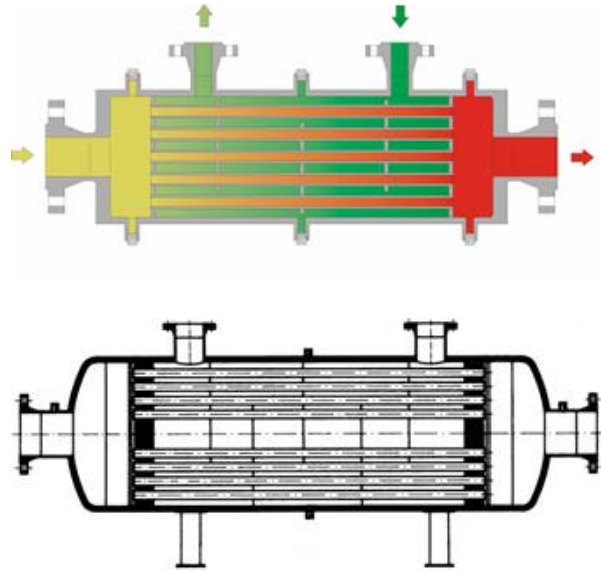


Natural gas heat exchangers, vertically mounted, are used to compensate for cooler temperatures resulting from flashing. They are available as welded-steel structures with clamp-fitted or welded tube plate, optionally with an admission pressure-resistant secondary circuit (water, steam). The standard models are designed for natural gas, acid gas / steam and water.

Flow rate: $\div 250,000 \text{ Nm}^3/\text{h}$

Pressure rating: $\div 260 \text{ bar}$

WAT-LW



Natural gas heat exchangers, horizontally mounted, are used to compensate for cooler temperatures resulting from flashing. The gas flows through the admission chamber in two welded tube plates, connected by straight pipes, to the outlet chamber. Optionally, the secondary circuit (water, steam) is admission pressure-resistant. The standard models are designed for natural gas, acid gas / steam and water.

Flow rate: $\div 400,000 \text{ Nm}^3/\text{h}$

Pressure rating: $\div 260 \text{ bar}$

Boilers

KF-2



The KF-2 boiler is suitable for heating in explosion-prone rooms. The burner chamber is sealed off against the room to be heated and provided with a burner control system.

Norm. thermal output:	1, 74 kW
Norm. connection pressure:	25 mbar
Max. surface temperature:	300 °C
Burner fuel:	natural gas

GW-5



The GW-5 gas boiler heats water for gas heating in the reducer station. The currentless, forced-circulation boiler is fitted with a burner control and water temperature limiting system.

Norm. thermal output:	5 kW
Norm. connection pressure:	30 mbar
Burner fuel:	natural gas