

**Product Catalog** 

Ausgabe 1/2021



#### Pipelife Gas-Stop™ 2021 Product Catalogue

All technical information is subject to possible changes to the products in terms of technical improvements. Our general terms and conditions of contract and delivery are valid for contracts.

Misprints and errors excepted.

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## 30 Years of Pipelife Gas-Stop™

#### 1991

As part of an extensive field test, the first Pipelife Gas-Stop™ excess flow valves being installed in gas distribution networks.

#### 1992

The Pipelife Gas-Stop™ safety system is presented to the public. A joint development project by Pipelife Austria and Austrian gas supply companies for active protection against gas leaks after damage to pipelines rapidly becoming a standard in modern network technology.

#### 2021

Pipelife Gas-Stop™ is one of Pipelife Austria's most successful export products. Energy distribution companies in over 40 countries in and outside Europe rely on the reliable function and the plus in safety in the supply network.

Pipelife Austria is the first choice for products for active protection against uncontrolled gas leaks after damage to gas pipes.

More than 10 million installed Pipelife Gas-Stop™ are a clear sign of this.

This success is the result of our 30 years of experience in the field of active protection of gas supply systems and our consistent pursuit of perfection in the areas of

- Technical expertise
- Functionality of the product lines
- Quality
- Flexible service

#### Our guiding principle

In a globalised and ever-changing world with its current challenges, such as the worldwide climate targets, demands for alternative energy sources (hydrogen) but also the efforts towards comprehensive digitalisation, our partners also expect corresponding initiatives and dynamics from us.

We are well prepared for this and always focus on <u>you</u> - our customers - and <u>your</u> requirements in all our activities.

Together - in close cooperation we will face and overcome all challenges. Thank you for your trust and active support so far.

Your Pipelife Gas-Stop™ team

## Pipelife Gas-Stop™ Excess Flow Valves for Gas Service and Main Lines

Gas leaks after damage or destruction of service or distribution lines can lead to accidents with serious damage to property and personal injury. The main causes are civil engineering work, operating errors in the course of venting work in the building, but also natural disasters such as earthquakes or subsidence in the ground.

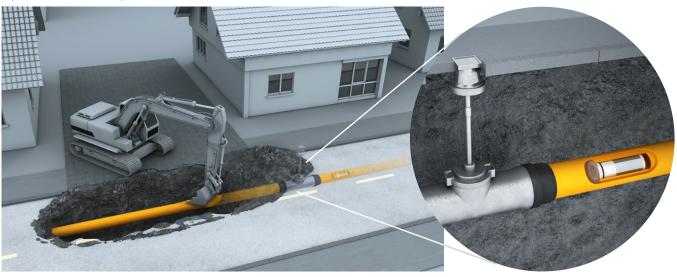
Pipelife Gas-Stop™ quick shut-off valves are installed as an active safety element in gas service lines (SL) and distribution lines (DL) and shut off immediately after damage has occurred. Accidents can thus be effectively prevented.





Also in the area of distribution lines (DL) of larger dimensions, especially the high operating pressures with - in case of damage - very large outflows are a considerable accident risk.

Fig. 2: Excavator damage to distribution line (DL)



In more than 40 countries worldwide Pipelife Gas-Stop $^{\text{m}}$  now represents the state of the art and is a fixed component of modern gas distribution systems.

The successful use of Pipelife Gas-Stop™ is confirmed by gas network operators with many years of application experience. According to current estimates, the use of Pipelife Gas-Stop™ has prevented gas leaks after damage to gas pipes in approx. **The major benefits** 

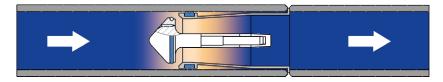
- Gas leaks are actively and immediately prevented.
- The risk of accidents is minimised until the network operator's service team arrives.
- To remedy gas leaks, spectacular operations are often required in public. Cases of damage to pipelines protected with Pipelife Gas-Stop™ are unspectacular.

#### **Functional description**

#### Normal operating situation - Nominal flow rate (Vn)

The nominal flow rate (Vn) is the maximum gas flow rate at the respective operating pressure. The Pipelife Gas-Stop $^{\text{TM}}$  is in the open position. Pulses, such as the switching on of consumer devices, have no effect on the secured open position.

Fig. 3



#### Pipe damage - Closing - Closing flow (Vs)

If the specified limit value for the flow rate (= closing flow - Vs) is exceeded, the Pipelife Gas-Stop<sup> $\mathbb{M}$ </sup> in the service line closes <u>within fractions of a second</u> (Fig. 4+5). The permanent closed state is ensured by the mains pressure acting on the shut off Pipelife Gas-Stop<sup> $\mathbb{M}$ </sup>. Small damages where the flow rate limit (Vs) is not exceeded will not cause the Pipelife Gas-Stop<sup> $\mathbb{M}$ </sup> to shut off.

When the Pipelife Gas-Stop™ is installed in distribution lines, the maximum time from closure to complete depressurisation within the damaged pipeline section can be up to approx. 10 minutes (depending on the operating pressure, diameter and length of the section).

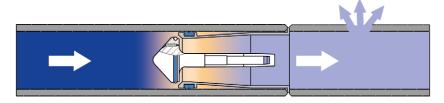
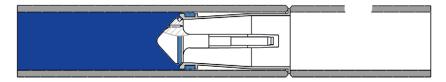


Fig. 5



#### **Recommissioning - Automatic opening**

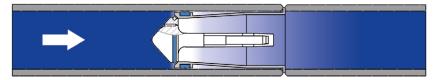
#### Pipelife Gas-Stop™ with overflow device (Code UE)

After a closing process, the system is put back into operation by equalising the pressure between the upstream and downstream pipeline sections. A small amount of gas (overflow volume) flows through a precisely defined, always open borehole via the shut off Pipelife Gas-Stop $^{\text{TM}}$ . The respective existing or permitted overflow volumes are determined by national regulations or network operators, depending on the requirements.

As soon as the cause of the Pipelife Gas-Stop<sup> $\mathsf{TM}$ </sup> closing has been eliminated (e.g. by repairing the damage to the pipeline), the pressure equalisation is established by the overflow volume and the Pipelife Gas-Stop<sup> $\mathsf{TM}$ </sup> opens automatically. Guide values for waiting times until reopening are specified in the respective technical data sheets.

Fig. 6 

✓ Automatic pressure equalisation ✓

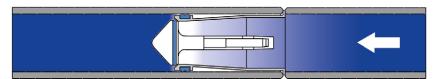


#### Pipelife Gas-Stop™ without overflow device

The pressure balance between the upstream and downstream pipeline sections is established by means of a suitable pressure source (e.g. natural gas or nitrogen cylinder). This is usually done via the main shut-off device (MSV).

Fig. 7 

∠ Pressure equalisation through counter-pressure ∠



## Pipelife Gas-Stop™ for Service and Distribution Lines Overview of standard types and product codes

In the table you will find the Pipelife Gas-Stop™ types of our <u>standard product range</u>. Information regarding the possibility of application-specific customised solutions or other special optional types is available on request.

		PE pipeline dimension					
	Operating pressure range	d <sub>a</sub> 20/DN15	d <sub>a</sub> 25/DN20	d <sub>a</sub> 32/DN25	d <sub>a</sub> 50/DN40	d <sub>a</sub> 63/DN50	d <sub>a</sub> 90/DN80 d <sub>a</sub> 110/DN100 d <sub>a</sub> 160/DN150
	<b>0.015–0.1 bar</b> 0.0015–0.01 MPa Colour code: GREEN				GS50/15UE GSA50/15UE	GS63/15UE GSA63/15UE	
	<b>0.025-1.0 bar</b> 0.0025-0.1 MPa Colour code: BLUE			GS32/25UE GSA32/25UE	GS50/25UE GSA50/25UE	GS63/25UE GSA63/25UE	GSA110/30UE**
nes DL	<b>0.035-5.0 bar</b> 0.0035-0.5 MPa Colour code: VIOLET			GS32/35 GSA32/35 GS32/35UE GSA32/35UE	GS50/35 GSA50/35 GS50/35UE GSA50/35UE	GS63/35 GSA63/35 GS63/35UE GSA63/35UE	
distribution lines DL	<b>0.05-0.4 bar</b> 0.005-0.04 MPa Colour code: GREY			GS32/50UE GSA32/50UE		GS63/50UE GSA63/50UE	
Service lines SL + distribu	<b>0.2-5.0 bar</b> 0.02-0.5 MPa Colour code: RED		GS25/200 GSA25/200 GS25/200UE GSA25/200UE	GS32/200 GSA32/200 GS32/200UE GSA32/200UE	GS50/200 GSA50/200 GS50/200UE GSA50/200UE	GS63/200 GSA63/200 GS63/200UE GSA63/200UE GS63/200UE/100*** GSA63/200UE/100***	GSA110/200 GSA110/200UE
	<b>0.5-5.0 bar</b> 0.05-0.5 MPa Colour code: ORANGE	GS20/500 GSA20/500* GS20/500UE GSA20/500UE*	GS25/500 GSA25/500* GS25/500UE GSA25/500UE*	GS32/500 GSA32/500 GS32/500UE GSA32/500UE		GS63/500 GSA63/500 GS63/500UE GSA63/500UE	
O,	<b>0.3-5.0 bar</b> 0.03-0.5 MPa Colour code: WHITE					GSA63/300 GSA63/300UE GSA63/300/S GSA63/300UE/S	GSA110/300 GSA110/300UE GSA110/300/S GSA110/300UE/S
	1.0-5.0 bar 0.1-0.5 MPa Colour code: YELLOW	GS20/1 GSA20/1* GS20/1UE GSA20/1UE*		GS32/1 GSA32/1 GS32/1UE GSA32/1UE		GS63/1 GSA63/1 GS63/1UE GSA63/1UE	GSA110/1 GSA110/1UE GSA110/1UE/ZV
DL	<b>0.03-1.0 bar</b> 0.003-0.1 MPa Colour code: BLUE						GSA110/30UE GSA110/30UE/ZV
Distribution lines I	<b>0.15-10.0 bar</b> 0.015-1.0 MPa Colour code: RED						GSA110/150UE
	<b>0.3-10.0 bar</b> 0.03-1.0 MPa Colour code: WHITE					GSA63/300UE GSA63/300UE/S	GSA110/300UE GSA110/300UE/S
Dis	1.0-10.0 bar 0.1-1.0 MPa Colour code: WHITE						GSA110/1UE GSA110/1UE/ZV

<sup>\*</sup> Available on request, \*\* Minimum operating pressure = 0.03 bar (0.003 MPa), \*\*\*Maximum operating pressure = 0.4 bar

#### **Product code explanation**

GSA32/200UE	GS	Α	32	200	UE
	Gas-Stop	Adapter variant	da PE pipe	Minimum operating pressure	Overflow device, automatic reopening

#### **System installation - Variants**

The Pipelife Gas-Stop™ is installed in a service line (SL) as close as possible to the branch of the service line from the distribution line (DL). The AL system installation is predominantly carried out by integration into the outlet of compatible tapping saddles (Pipelife Gas-Stop™ Type GS); electrofusion couplers (GSAE) or by means of a special pipe section (adapter - see also Type GSA). In addition to the standard installation variants listed, other system integrations are also possible on request (e.g. steel adapter or similar)

#### Type GS

For installation in outlet spigots of (compatible) tapping saddles suitable in the internal dimensions or other fittings. Manufacturer of corresponding compatible tapping saddles or other moulded parts will

of corresponding compatible tapping saddles or other moulded parts will gladly be provided on request.

- 1. Tapping saddle
- 2. Pipelife Gas-Stop™ Type GS
- 3. Electrofusion couplers
- 4. PE service line

#### Type GSA

Integrated in a pipe section (adapter) made of PE 100/SDR 11

- 1. Tapping saddle
- 2. Pipelife Gas-Stop™ Type GSA
- 3. Electrofusion couplers
- 4. PE service line

#### **Type GSAE**

Integrated in electrofusion coupler - e. g. FRIASTOPP®

- 1. Tapping saddle
- 2. Electrofusion coupler with built-in Pipelife Gas-Stop™ Type GSAE
- 3. PE service line

#### **Main dimensions**

#### Pipelife Gas-Stop™ Type GS

Pipelife Gas-Stop™ Type	L1 mm	Type GS
GS20	≤ 45*	
GS25	≤ 50*	
GS32	≤ 65*	
GS50	≤ 75*	
GS63	≤ 100*	l-

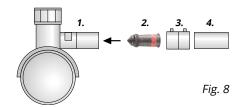
<sup>\*</sup> Type-dependent tolerance

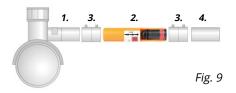
#### Pipelife Gas-Stop™ Type GSA

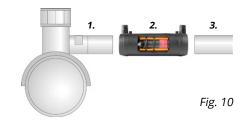
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Pipelife Gas-Stop™ Type	d <sub>a</sub> mm	DN mm	L2 mm	Type GSA
GSA20	20	15	150 +/-1	
GSA25	25	20	150 +/-1	
GSA32	32	25	150 +/-1	
GSA50	50	40	150 +/-1	8
GSA63	63	50	150 +/-1	L2
GSA110	110	100	300 +/-1	
GSA110ZV	110	100	400 +/-1	

#### Pipelife Gas-Stop™ Type GSAE

The dimensions of these types correspond to those of the commercially available  $FRIASTOPP^{\mathbb{M}}$  type electrofusion couplers (manufacturer: Aliaxis Deutschland GmbH. – www.aliaxis.de.







#### **Materials - Component overview**

The materials used are resistant to all fuel gases and their accompanying substances as well as hydrogen.

We will be happy to provide you with material data for the individual components on request.

- Shut-off element Polyphenylene sulphide - PPS
- ② Flow element Polyphenylene sulphide - PPS
- ③ Seals Nitrile butadiene rubber - NBR
- Spring Stainless steel
- S Housing-Adapter Polyethylene PE 100 – SDR 11



- ① Shut-off element (not shown) Polyoxymethylene – POM or stainless steel
- ② Flow element Polyoxymethylene – POM or stainless steel
- ③ Seals Nitrile butadiene rubber - NBR
- ④ Spring (not shown) Stainless steel
- S Housing-Adapter Polyethylene PE 100 – SDR 11
- ⑥ Protective screen Stainless steel



#### **Quality assurance - Factory tests**

Pipelife Gas-Stop™ are safety products that are <u>subject to the highest</u> <u>demands in terms of service life and operational safety</u>. Before delivery, both the individual components and the end products are subject to extensive quality checks.

One of the most important test steps is to <u>check the function before delivery</u>. The shut-off flow and tightness of each individual Pipelife Gas-Stop<sup> $\mathbf{M}$ </sup> is measured, recorded and stored on automated test stands.

After a positive test, each Pipelife Gas-Stop™ is marked with an individual serial number. The test results and the data of the individual components are assigned to this serial number. This ensures complete traceability.

Real operating conditions of the piping network are simulated on a test stand operated with natural gas. The tests carried out on this test site ensure that Pipelife Gas-Stop™ excess flow valves meet the practical requirements during daily network operation for the safety of function in normal operation as well as during shut-off under all conditions of daily network operation. Here, for example, influences (e.g. pulses) from control and consumer appliances that affect the Pipelife Gas-Stop™ are precisely defined and taken into account in the product and functional properties.

The development of new product lines and customised special solutions are also primarily tested and approved on our natural gas test stand under practical conditions.



Production test stand

Fig. 14



Natural gas test stand

#### Certifications

Depending on the respective network-specific requirements, there are national approvals as well as various international certifications for the various product lines.









ÖVGW

DVGW

Certigaz

Gas Natural Fenosa











ROZTECHNADZOR/GOST

SVGW

ITALGAS

We will provide you with certificates or detailed information on further certifications or certification options on request.

# Technical information on the product data sheets

#### Flow information

#### Nominal flow rate (Vn)

Unless otherwise specified, all flow rate data for the nominal flow rate (Vn) and the shut-off flow rate (Vs) in the tables of the product data sheets are applicable for natural gas H  $\rho(n)$  = 0.74 kg/m³ under standard conditions (1013.25 mbar, 0° C).

The nominal flow rate (Vn) of the Pipelife Gas-Stop<sup>M</sup> depends on the operating pressure (pe) in the piping network. For simplification or standardisation purposes, the minimum operating pressure in the piping network should always be assumed when selecting the type of Pipelife Gas-Stop<sup>M</sup>.



#### **Example:**

A planned line  $d_a32/DN25$  for a capacity of 500 kW (50 m³/h) is to be manufactured. The minimum operating pressure in the distribution network is 2.0 bar. The nominal flow rate of the Pipelife Gas-Stop<sup>™</sup> type GS32/200 at an input pressure of 2.0 bar is 56 m³/h.

The GS32/200 is therefore suitable for this application (see also the following diagram).

In addition, it can be specified that all service lines of dim. d32/DN25 with a nominal flow rate  $\leq$  56 m³/h can be uniformly equipped with type GS32/200 (see also page 14 "Selection of the Pipelife Gas-Stop™").

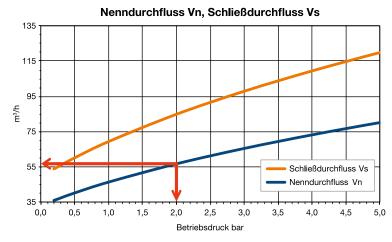


Fig. 15

#### Closing flow rate (Vs)

## The shut-off flows specified in the tables predominantly correspond to the respective country-specific technical rules and regulations.

#### **Example:**



At an operating pressure of 2.0 bar, the Pipelife Gas-Stop<sup>™</sup> GS32/200 closes at a flow rate of **92 m³/h** (see also following diagram). If, for example, damage to the size of approx. Ø8.5 mm were to occur to the service line within a distance of 10 m from the Pipelife Gas-Stop<sup>™</sup>, the Pipelife Gas-Stop<sup>™</sup> will shut-off.

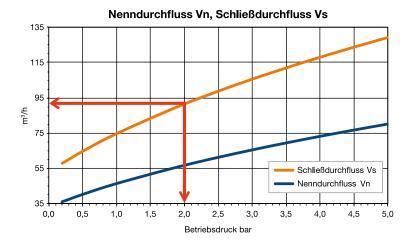


Fig. 16

The leak rates comply with the respective country-specific technical rules and regulations.

**Example:** the permitted leak rate according to DVGW G 5305-2 is max. 3.8 I/h (natural gas H).

Overflow device (UE)

Defined, always open borehole through which a small amount of gas flows when Pipelife Gas-Stop™ is shut off.

**Example:** the permitted overflow volume according to DVGW G 5305-2 is max. 38.0 l/h (natural gas H).

The specified guide values for reopening times refer to 1 m pipe length (PE SDR 11) between Pipelife Gas-Stop™ and a downstream shut-off valve.

**Reopening times** (with automatic reopening function (code UE)

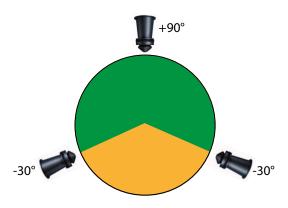
Leak rate and overflow volume

**Installation positions** 

Unless otherwise specified, the flow data in the product data sheets refer to all installation positions.

#### Remark:

For products whose installation posion is exactly defined the follwing positoning in regard to the flow direction is applicable (see exemplary graphics hereafter



Pipelife Gas-Stop™ can be used for other gas types in the gas phase without further adjustments. Using the appropriate correction factor, nominal flow rate (Vn) and shut-off flow (Vs) for other gas types can be calculated as follows:

Flow values for other gases or gas types

Flow value (Vn or Vs) for natural gas according to the flow tables of the respective technical data sheets x correction factor = flow value other gas type

$$f = \sqrt{\frac{0.74}{\rho n}}$$

fx = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

**Correction factor calculation** 

Vn = 10 m<sup>3</sup>/h natural gas H

? = Propane flow rate -  $\rho(n)$  2.01 kg/m<sup>3</sup>

 $10 \times \sqrt{0.74/2.01}$  = 6.06 m³/h propane

Propane calculation example

Vn = 10 m<sup>3</sup>/h natural gas H

? = Natural gas L flow rate -  $\rho(n)$  0.83 kg/m<sup>3</sup>

 $10 \times \sqrt{0.74/0.83} = 9.4 \text{ m}^3/\text{h} \text{ natural gas L}$ 

Natural gas L calculation example

Vn = 10 m<sup>3</sup>/h natural gas H

? = Hydrogen mixture flow rate [80% CH4 / 20% H2]

 $\rho(n) = 0.62 \text{ kg/m}^3$ 

 $10 \times \sqrt{0.74/0.62}$  = 10.92 m³/h hydrogen mixture

Hydrogen mixture 80% natural gas H/20% **H2** calculation example

## Protectable pipe length, general

The guide values for the protectable pipe length specified in the technical data sheets define that pipeline section within which a Pipelife Gas-Stop<sup>TM</sup> closes at a certain magnitude of damage. The protectable pipe length depends on the factors dimension of the pipeline ( $d_a/DN$ ), operating pressure (pe), magnitude of damage (%), outflow escape coefficient ( $\mu$ ) and pipe roughness (k).

The factors of magnitude of damage and escape coefficient have been determined statistically within the framework of a scientific study on pipelines actually damaged in practice during civil engineering work. The statistical evaluation showed average magnitudes of damage of approx. 70 % of the pipe cross-section and escape coefficients of approx.  $\mu$  = 0.6.

#### Max. protectable pipe length

Unless otherwise specified, the specification of the protectable pipe length refers to the pipeline section from the discharge side of the Pipelife Gas- $Stop^{TM}$  to the damaged area.



#### Service line damage magnitude escape coefficient (SL)

The escape coefficient is determined by the nature of the damaged area. Smooth edges produce higher escape coefficients; deformations and rough edges produce low escape coefficients. Calculations or specifications of guide values for the max. protectable pipe length are carried out with the practice-related average escape coefficient 0.6 at a damage magnitude of 70 %.

Distribution line damage magnitude escape coefficient (DL)

The escape coefficient 0.6 is used to calculate the guide values for the max. protectable pipe length at DL. For the damage magnitudes, for pipelines  $\leq$ d<sub>a</sub>63/DN50 damage of  $\varnothing$  30 mm is used in the calculation and for pipelines  $\geq$ d<sub>a</sub>63/DN50 damage of  $\varnothing$  50-60 mm.

Service line (SL) pipe roughness

The pipe roughness of PE pipes is defined as k = 0.05 mm.

Distribution line (DL) pipe roughness

For distribution lines (DL), an integral pipe roughness of k = 0.3 mm has been defined. This value takes into account an average number of fittings.

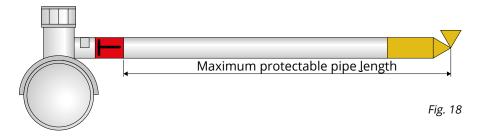
## Protectable pipe length according to DVGW\* G 5305-2

The guide values for the protectable pipe length of the DVGW-certified Pipelife Gas-Stop<sup>TM</sup> products are calculated according to the technical test specification DVGW G 5305-2, Annex B. The fundamental resistance coefficients ( $\zeta$ ) correspond to Table B1 of this testing specification.



According to the definition of DVGW G 5305-2, the specification or calculation of the protectable pipe length is carried out from the discharge side of the Pipelife Gas-Stop $^{\text{TM}}$  to the discharge side of the fully opened main shut-off valve (MSV).

\* German Technical and Scientific Association for Gas and Water e.V.



#### Note:

In practice, protectable pipe lengths can differ significantly due to different resistance coefficients [ $\zeta$ ] depending on the brand, e.g. for tapping saddles or house entry combinations.



The specified values for the pressure loss at Vn always refer to the pressure drop caused by the Pipelife Gas-Stop $^{\text{TM}}$  at maximum nominal flow rate. If the current flow rate is lower than the maximum nominal flow rate, this also means a lower pressure drop.

Pressure drop ( $\Delta p$ )

#### **Example:**

Pipelife Gas-Stop™ Type GS32/200UE



Nominal flow rate = 40 m<sup>3</sup>/h at 1.0 bar > **Pressure drop = 12 mbar** 

Nominal flow rate = 25 m<sup>3</sup>/h at 1.0 bar > **Pressure drop = 6 mbar** 

#### **Abbreviations and definitions:**

Vn Nominal flow rate Vs Shut-off flow rate

m³/h Flow specification under standard conditions

(barometric pressure 1013.25 mbar, gas temperature 0° C)

pe operating pressure UE Overflow device

 $\begin{array}{ll} \mu & \quad \text{Escape value /coefficient} \\ \zeta & \quad \text{Coefficient of resistance} \end{array}$ 

Δp Pressure dropk Pipe roughnessNZ Standard state

Conversion factors

#### Volume

 $1 \text{ m}^3/\text{h} = 35.31 \text{ cfh}$ 

#### **Pressure**

1 bar = 0.1 MPa = 1000 hPa = 14.50 psi 1 psi = 0.068 bar

#### Weight

1 kg = 2.20 lb 1 lb = 0.45 kg

#### Length

1 cm = 0.032 ft = 0.39 in 1 ft = 12 in = 30.48 cm 1 in = 2.54 cm

## Pipelife Gas-Stop™ for service lines (SL) technical application notes

#### Choice of Pipelife Gas-Stop™

To simplify the choice of Pipelife Gas-Stop $^{\rm m}$  for service lines, always base this on the minimum operating pressure.



#### Example:

Max. operating pressure in the piping network = 1 bar Minimum operating pressure = 0.5 bar

Planned connection dimensions d<sub>a</sub>32/DN25, d<sub>a</sub>63/DN50 and d<sub>a</sub>110/DN100

For the planned dimensions, according to the list of types (see "Product range overview - types/product codes") Pipelife Gas-Stop $^{\text{M}}$  are available in the pressure range

0.025-1.0 bar - colour code BLUE and

0.2-5.0 bar - colour code RED

. The respective nominal flow rates at 0.5 bar are as follows:

#### Pressure range 0.025-1.0 bar - BLUE

Туре	Line dimension	Nominal flow rate
GS32/25UE	d <sub>a</sub> 32/DN25	12 m³/h
GS63/25UE	d <sub>a</sub> 63/DN50	48 m³/h
GSA110/30UE	d <sub>a</sub> 110/DN100	144.5 m <sup>3</sup> /h

#### Pressure range 0.2-5.0 bar - RED

Type	Line dimension	Nominal flow rate
GS32/200	d <sub>a</sub> 32/DN25	40 m³/h
GS63/200	d <sub>a</sub> 63/DN50	200 m³/h
GSA110/200	d <sub>a</sub> 110/DN100	565 m³/h

According to the desired maximum nominal flow rates, the BLUE or RED type series can now be selected.

Now the appropriate  $Gas\text{-}Stop^{\text{TM}}$  type for the respective connection dimension is exactly defined, as well as the maximum nominal flow rate for all new connections in the network at the same time.

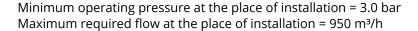
## Pipelife Gas-Stop™ for distribution (main) lines (DL) Technical application details and special product features

At the intended place of installation of the Pipelife Gas-Stop<sup> $\mathsf{TM}$ </sup> in the distribution line, the minimum operating pressure and the required max. flow rate must be known. One selects the appropriate Pipelife Gas-Stop<sup> $\mathsf{TM}$ </sup> from the technical data sheets with these values.

Choice of Pipelife Gas-Stop™

#### **Example:**

PE pipe dimension da110, SDR 17



The suitable Pipelife Gas-Stop™ is the type GSA110/300UE (see technical data sheet)

The nominal flow rate (Vn) of this type is **1018.5**  $m^3/h$  at **3.0** bar. The protectable pipe length for a leak size of approx.  $\varnothing$  50 mm is **2,100** m.

Pipelife Gas-Stop™ for distribution lines are designed so that they can also be installed in intermeshed piping networks. Flow is possible in both flow directions under almost the same conditions.

#### Note:

Pipelife Gas-Stop™ for distribution lines are always equipped with an overflow device. In order to avoid long waiting times until automatic reopening, the Pipelife Gas-Stop™ should always be installed **together with a manually operated shut-off valve connected directly upstream or downstream**. Due to the short pipeline section between Pipelife Gas-Stop™ and the shut-off valve, the pressure equalisation is established very quickly via the overflow opening (volume) and the GS opens.



The Pipelife Gas-Stop™ for distribution lines has special integrated contamination guards (screens). Particles (sand, small stones, etc.) with a size of <2 mm (for dimension d<sub>a</sub>63/DN50) or <6 mm (for dimension d<sub>a</sub>110/DN100) are transported through the Pipelife Gas-Stop™ without leaving any residue. The penetration of dirt particles >2 mm (for dimension d<sub>a</sub>63/DN50) or >6 mm (for dimension d<sub>a</sub>110/DN100) is prevented by screens fitted on the input side made from stainless steel with an appropriate mesh width.

#### **Contamination protection**

# Pipelife Gas-Stop™ installation and operating instructions

#### Type series GS

# Fig. 19

#### **General**

These types of Pipelife Gas-Stop™ can be inserted into the outlet of compatible tapping saddles (Fig. 19). Here it is to be observed that the insertion must take place without twisting and without deviation from the horizontal position. The use of mechanical tools is not permitted without prior consultation with Pipelife. To make insertion easier - up to the limit stop - the outer sealing ring (lip ring) can be moistened with water.

Two stickers are affixed to each Pipelife Gas-Stop<sup> $\mathsf{TM}$ </sup> type GS (tear-off possibility). On these stickers is the serial number as well as other important information for the identification of the Pipelife Gas-Stop<sup> $\mathsf{TM}$ </sup>. To have this data available at any time until the moment of installation in the pipe system, the tear-off section should be fixed at a suitable point on the tapping saddle. On request, we will provide the names of manufacturers of compatible tapping saddles.

#### Type series GSA



The Pipelife Gas-Stop™ is integrated into a certified pipe section (adapter made of PE 100/SDR 11) (Fig. 20). The stickers with the serial number and other information for the identification of the Pipelife Gas-Stop™ are located both on the adapter as well as on the integrated Pipelife Gas-Stop™ itself (no tear-off possibility, separate type plate is enclosed).

#### Type series GSAE



The Pipelife Gas-Stop<sup>™</sup> is integrated into an electrofusion coupler (Fig. 21). The stickers with the serial number and other information for the identification of the Pipelife Gas-Stop<sup>™</sup> are located both on the electrofusion coupler as well as on the integrated Pipelife Gas-Stop<sup>™</sup> itself (no tear-off possibility, separate type plate is enclosed).

Note:



Each packaging unit of the types GSA and GSAE is additionally packed with a three-part self-adhesive type plate and a cable tie. This contains

- the type-specific technical data,
- the serial or batch number of the product,
- a separately detachable information part which indicates the presence of a Pipelife Gas-Stop™ in the connection line and which can be attached at a suitable location inside the object. (e.g. meter box)

#### **Before installation**

Check that the colour of the sticker with the serial number corresponds to the intended operating pressure range. The different operating pressure ranges of the Pipelife Gas-Stop<sup>M</sup> are identified by colour codes. The colour of the sticker with the serial number corresponds to a certain operating pressure range in each case. The nominal flow rates and  $\Delta p$  values are

either shown on the label or specified in the respective product data sheets. If applicable, please note the permitted installation position (see also page 11).



Colour code	Operating	pressure range	Comments
	bar	MPa	
GREEN	0.015 - 0.1	0.0015 - 0.01	
BLUE	0.025 – 1.0	0.0025 - 0.1	DVGW Type AD
VIOLET	0.035 - 5.0	0.0035 - 0.5	DVGW Type U
RED	0.2 - 5.0	0.02 - 0.5	DVGW Type S
YELLOW	1.0 – 5.0	0.1 – 0.5	
GREY	0.05 – 0.4	0.005 - 0.04	
ORANGE	0.5 – 5.0	0.05 - 0.5	
WHITE	0.3 - 5.0	0.03 - 0.5	Installation location AL
RED	0.15 – 10.0	0.015 – 1.0	Installation location VL
WHITE	0.3 – 10.0	0.03 – 1.0	Installation location VL
WHITE	1.0 – 10.0	0.1 – 1.0	Installation location VL
BLUE	0.03 – 1.0	0.003 – 0.1	Installation location VL + AL

#### **Note/Documentation:**



To ensure exact identification of the Pipelife Gas-Stop<sup> $\mathbf{M}$ </sup> installed in the piping network, we recommend documenting the serial number or batch number of the Pipelife Gas-Stop<sup> $\mathbf{M}$ </sup> in the installation log or on the installation plan.

#### Installation

#### Pipelife Gas-Stop™ in the tapping saddle - Type GS

Normally, the Pipelife Gas-Stop<sup>™</sup> is already fitted in the outlet by the manufacturer of the tapping saddle. If this is not the case, please observe the section "General Type Series GS" above. To prevent contamination, the protective cap on the outlet part of the tapping saddle must only be removed immediately before welding to the service line begins. For the remaining steps, please follow the working instructions of the respective manufacturer of the tapping saddle.

#### Pipelife Gas-Stop™ in PE adapter v Type GSA

Installation in the pipe system is carried out - under consideration of the gas flow direction - using commercially available electrofusion couplers. The weld ends of the adapter made of PE 100 are to be machined. Make sure that no chips get inside the Pipelife Gas-Stop $^{\text{\tiny M}}$ . The rest of the work is carried out according to common technical welding guidelines.

#### Pipelife Gas-Stop™ in the electrofusion coupler - Type GSAE

Installation in the pipe system is carried out - under consideration of the gas flow direction - according to the installation instructions of the electrofusion coupler manufacturer.

## Special notes on Pipelife Gas-Stop™ for distribution lines (DL) d<sub>a</sub>110/DN100:

Pipes or pipe sections of the SDR 11 and SDR 17 pipe series can be welded on. Due to the dead weight of the Pipelife Gas-Stop $^{\text{TM}}$ , a retainer (holding clamp) must be used during the welding process. Pipelife Gas-Stop $^{\text{TM}}$  GSA110 may only be installed horizontally. Deviations of +/-5° are permitted. The rest of the work is carried out according to common technical welding guidelines.

#### **Commissioning**

#### Pipelife Gas-Stop™ in the connection line (SL) with overflow device (UE)

- Gradually open the main shut-off valve (MSV) for ventilation, i.e. with a small valve opening. If necessary, fit a ventilation hose on the MSV and route it to the outside for safe discharge of the gas.
- Should the Pipelife Gas-Stop™ shut off, an excessive MSV opening was the cause. Close the MSV the Pipelife Gas-Stop™ opens automatically depending on the length and diameter of the connection line. Details on the reopening times can be found in the product data sheets.
- With pressure measurement equipment connected, the operating condition of the Pipelife Gas-Stop™ (open/closed) can be determined via the operating pressure. If the operating pressure before and after the Pipelife Gas-Stop™ is the same, it is or has opened.
- Repeat the venting process with a smaller MSV opening.
- After complete ventilation close MSV.



#### Note:

Before the repair, the overflow quantity (see technical data sheets) leaks at the damaged area. The smallest possible leakage in the pipeline section after the Pipelife Gas-Stop $^{\rm m}$  can cause part or all of the overflow quantity to escape. This can lead to a considerable delay or even prevent the automatic reopening.

#### Reopening time examples

GS32/200UE (data sheet page 37)
Pipeline section d<sub>a</sub>32/DN25
Length of the connection line = 12 m
Operating pressure = 0.5 bar

Reopening time = approx. 660 seconds = 11 min. 00 sec.

GS63/35UE (data sheet page 33) Pipeline section d<sub>a</sub>63/DN50 Length of the connection line = 20 m Operating pressure = 0.05 bar

Reopening time = approx. 1040 seconds = 17 min. 20 sec.

#### Pipelife Gas-Stop™ in the service line (SL) without overflow device

- Gradually open the main shut-off device (MSV) for ventilation, i.e. with a small valve opening. If necessary, fit a ventilation hose on the MSV and route it to the outside for safe discharge of the gas.
- Should the Pipelife Gas-Stop™ shut off, an excessive MSV opening was the cause. Close the MSV. Using a suitable pressure source, e.g. nitrogen or natural gas cylinder, counter-pressure must now be applied up to mains pressure in order to reopen the Pipelife Gas-Stop™.
- With pressure measurement equipment connected, the operating condition of the Pipelife Gas-Stop™ (open/closed) can be determined via the operating pressure. If the operating pressure before and after the Pipelife Gas-Stop™ is the same, it is or has opened.
- Repeat the venting process with a smaller valve opening.
- After complete ventilation close MSV.



#### Note:

As an alternative to the gradual manual actuation of the MSV during ventilation, a flange with a plug-in coupling and an appropriately small dimensioned ventilation hose can also be fitted, for example. This procedure allows the MSV to be operated at full opening without the Pipelife Gas- $Stop^{\mathbf{m}}$  closing.

## Pipelife Gas-Stop™ in the distribution line (DL) with overflow device (UE)

• Shut-off valve (preferably slide) upstream or downstream of the Pipelife Gas-Stop™ is closed. Fill the pipeline section with natural gas by opening the shut-off valve associated with the Pipelife Gas-Stop™ gradually.

#### Note:

Opening the shut-off valve too quickly can lead to the Pipelife Gas-Stop<sup> $\mathbf{M}$ </sup> becoming blocked. Should this occur, carry out recommissioning (see Recommissioning). If a ball valve is used as a shut-off valve, it must be opened particularly slowly and gradually. In the initial phase, open the ball valve max, 2-3°.



After establishing pressure equalisation, open the shut-off valve completely. The Pipelife Gas-Stop $^{\text{M}}$  is now in operation.

#### Reopening time examples

GSA110/30UE (data sheet page 29) Pipeline section da110/DN100, SDR 17 Length between Pipelife Gas-Stop™ and the shut-off valve = 2 m Operating pressure = 0.05 bar

Reopening time = approx. 108 seconds = 1 min. 48 sec.

GSA63/300UE/S (data sheet page 50)
Pipeline section d<sub>a</sub>63/DN50
Length between Pipelife Gas-Stop™ and the shut-off valve = 3 m
Operating pressure = 2 bar
Reopening time = approx. 219 seconds = 3 min. 39 sec.

#### Recommissioning

#### Pipelife Gas-Stop™ in the service line (SL)

After damage to a service line and corresponding leak size, the Pipelife Gas-Stop™ closes. Please note that the overflow quantities or leak rates exit at the damaged area. The service line must be repaired in compliance with the respective required safety regulations. After completion, commissioning can be carried out according to the known operations.

#### Pipelife Gas-Stop™ in the distribution (main) line (DL)

After damage to a distribution line within the protected area and corresponding leak size, the Pipelife Gas-Stop<sup> $\mathrm{IM}$ </sup> closes. Before starting the repair, close the shut-off valve associated with the Pipelife Gas-Stop<sup> $\mathrm{IM}$ </sup> - may be installed before or after the Pipelife Gas-Stop $^{\mathrm{IM}}$ . The repair must be carried out in compliance with the respective required safety regulations. The recommissioning (filling) of the pipeline section can now be carried out by gradually opening the associated shut-off device.

#### Installation with reduction

#### Pipelife Gas-Stop™ in the service line (SL)

In the operating pressure range >0.1 bar, it is also possible to use the Pipelife Gas-Stop<sup>M</sup> for the next smaller dimension by using appropriate reductions (Fig. 22+23).

When using Pipelife Gas-Stop<sup>M</sup> for pipelines of the next larger pipe dimension and using electrofusion reductions, an intermediate piece must be used to exclude axial displacement of the Pipelife Gas-Stop<sup>M</sup> or the installation unit (Fig. 24).

We will provide you with detailed information on all other reduction options upon request.

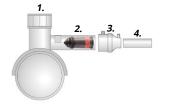
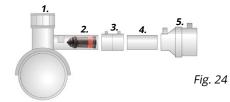


Fig. 22

- 1. Tapping saddle
- 2. Pipelife Gas-Stop™ Type GS
- 3. Electrofusion reduction
- 4. PE service line



- 1. Tapping saddle
- 2. Pipelife Gas-Stop™ Type GSA
- 3. Electrofusion reduction
- 4. PE service line

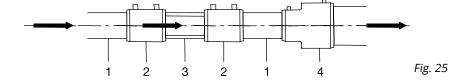


- 1. Tapping saddle
- 2. Pipelife Gas-Stop™ Type GS
- 3. EF coupler
- 4. Intermediate piece
- 5. Electrofusion reduction

#### Pipelife Gas-Stop™ in the distribution line (DL)

When using Pipelife Gas-Stop<sup>™</sup> for pipelines of the next larger dimension, an intermediate piece must be used to exclude axial displacement of the Pipelife Gas-Stop<sup>™</sup> (Fig. 25).

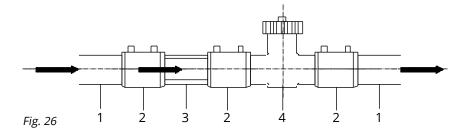
- 1. PE pipeline da110 or intermediate piece
- 2. Electrofusion coupler d110
- 3. Pipelife Gas-Stop™ GSA110
- 4. Electrofusion coupler d110/d160



20

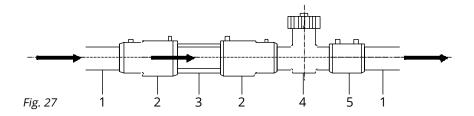
#### **Installation examples**

#### Pipelife Gas-Stop™ in the distribution line (DL)



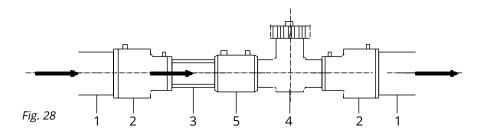
#### Pipelife Gas-Stop™ Installation with shut-off fitting

- 1. PE pipeline d<sub>a</sub>110
- 2. Electrofusion coupler d<sub>a</sub>110
- 3. Pipelife Gas-Stop™ GSA110
- 4. Shut-off fitting DN100



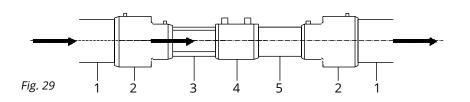
#### Pipelife Gas-Stop™ Installation with reduction and shut-off fitting

- 1. PE pipeline d₃90
- 2. Electrofusion coupler d90/d110
- 3. Pipelife Gas-Stop™ GSA110
- 4. Shut-off fitting DN90
- 5. Electrofusion coupler d90



#### Pipelife Gas-Stop™ Installation in pipeline d<sub>a</sub>160 with shut-off fitting DN100

- 1. PE pipeline d<sub>a</sub>160
- 2. Electrofusion coupler d160/d110
- 3. Pipelife Gas-Stop™ GSA110
- 4. Shut-off fitting DN100
- 5. Electrofusion coupler d110



## Installation in pipeline d<sub>a</sub>160 without shut-off fitting

1. PE pipeline d<sub>a</sub>160

Pipelife Gas-Stop™

- 2. Electrofusion coupler d160/d110
- 3. Pipelife Gas-Stop™ GSA110
- 4. Electrofusion coupler d110
- 5. Intermediate piece d<sub>a</sub>110

A DN150 shut-off valve can be arranged on the discharge side.

#### Protectable pipe lengths, examples

#### Pipelife Gas-Stop™ in the distribution line (DL)

Pipelife Gas-Stop™ code: GSA110/150UE (data sheet page 51) Pipeline PE d<sub>a</sub>110/SDR 17 pe = 1 bar



GSA110/150UE | I = 1484 m

- 1. PE pipeline d<sub>a</sub>110
- 2. Pipelife Gas-Stop™ GSA110/150UE
- 3. Shut-off valve DN100

r.v.

Protectable pipe length (I)

Pipelife Gas-Stop™ code: GSA110/300UE (data sheet page 52) Pipeline PE d<sub>a</sub>110/SDR 11 pe = 3 bar

- 1. PE pipeline d<sub>a</sub>110
- 2. Pipelife Gas-Stop™ GSA110/300UE
- 3. Shut-off valve DN100



Fig. 30

GSA110/300UE | I = 1357 m

Pipelife Gas-Stop™ code: GSA110/300UE/S (data sheet page 53) Ring line PE d₁110/SDR 11 pe = 6 bar

- 1. PE pipeline d<sub>a</sub>110
- 2. Pipelife Gas-Stop™ GSA110/300UE/S
- 3. Shut-off valve DN100

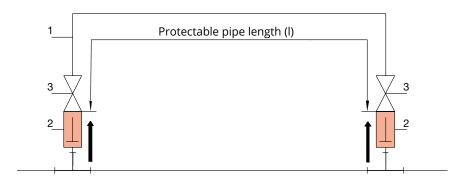


Fig. 32

GSA110/300UE/S I = 1974 m

Pipelife Gas-Stop™ code: GSA110/150UE (data sheet page 51) Branch PE da110/SDR 11 pe = 4 bar

- 1. PE pipeline d<sub>a</sub>110
- 2. Pipelife Gas-Stop™ GSA110/150UE
- 3. Shut-off valve DN100

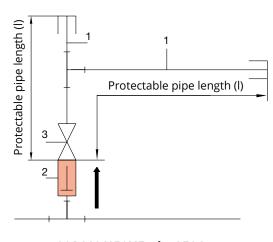


Fig. 33

GSA110/150UE I = 3526 m

## Product data sheets

## Pipelife Gas-Stop<sup>m</sup> for service and distribution (main) lines (SL + DL)

		Operating pressure range	Page
	ı	<b>0.015–0.1 bar</b> 0.0015–0.01 MPa Colour code: GREEN	24-25
DL	ı	<b>0.025-1.0 bar</b> 0.0025-0.1 MPa Colour code: BLUE	26-28
Service lines SL + distribution lines Dl		<b>0.035-5.0 bar</b> 0.0035-0.5 MPa Colour code: VIOLET	31-33
istributi		<b>0.05-0.4 bar</b> 0.005-0.04 MPa Colour code: GREY	34-35
s SL + di		<b>0.2-5.0 bar</b> 0.02-0.5 MPa Colour code: RED	36-41
vice line		<b>0.5-5.0 bar</b> 0.05-0.5 MPa Colour code: ORANGE	42-45
Ser		<b>0.3-10.0 bar</b> 0.03-1.0 MPa Colour code: WHITE	49-50
		1.0-5.0 bar 0.1-0.5 MPa Colour code: YELLOW	46-48
7.	ı	<b>0.03-1.0 bar</b> 0.003-0.1 MPa Colour code: BLUE	29-30
Distribution lines DL		<b>0.15-10.0 bar</b> 0.015-1.0 MPa Colour code: RED	51
		0.3-10.0 bar 0.03-1.0 MPa Colour code: WHITE	52-53
		1.0-10.0 bar 0.1-1.0 MPa Colour code: WHITE	54-55

## Pipelife Gas-Stop™ GS50/15UE

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>50/DN40





Operating pressure: 0.015-0.1 bar (0.0015-0.01 MPa)

Colour code: Green

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS50/15UE	•	•	-
GSA50/15UE	•	_	•

#### **Technical data**

Operating pressure pe mbar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time sec/m
15	16.0	30.5	65	4
50	16.0	31.0	97	12
75	16.0	31.5	>100	14
100	16.0	32.0	>100	16

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

#### Pressure drop at Vn:

≤1.0 mbar

#### **Installation position:**

Deviation of  $\pm 30^{\circ}$  from the horizontal position permitted.

#### Overflow volume (UE type):

GS50/15UE ≤38 l/h at 0.1 bar

#### **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

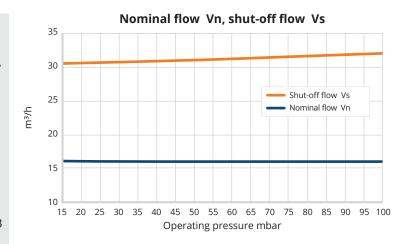
#### **Certifications/test basis:**

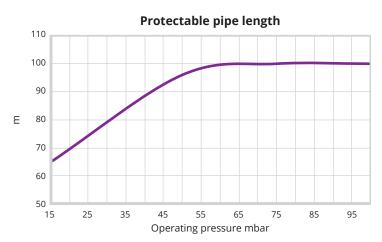
EU-AT ÖVGW QS-G 494



#### Note:

For further information, see "Explanations on the product data sheets".





## Pipelife Gas-Stop™ GS63/15UE

Excess Flow Valve for Service Lines (SL) d<sub>3</sub>63/DN50





Operating pressure: 0.015-0.1 bar (0.0015-0.01 MPa)

Colour code: Green

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/15UE	•	•	-
GSA63/15UE	•	_	•

#### **Technical data**

Operating pressure pe mbar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time sec/m
15	25.0	48.5	87	5
50	25.0	49.0	100	15
75	25.0	49.5	>100	22
100	25.0	50.0	>100	25

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

#### Pressure drop at Vn:

≤1.0 mbar

#### **Installation position:**

Deviation of  $\pm 30^{\circ}$  from the horizontal position permitted.

#### Overflow volume (UE type):

GS63/15UE ≤38 l/h at 0.1 bar

#### **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

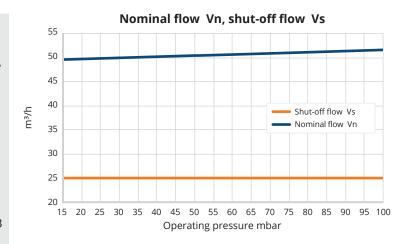
#### **Certifications/test basis:**

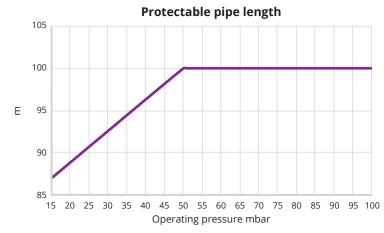
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#### Note:

For further information, see "Explanations on the product data sheets".





## Pipelife Gas-Stop™ GS32/25UE

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>32/DN25





Operating pressure: 0.025-1.0 bar (0.0025-0.1 MPa)

Colour code: Blue

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS32/25UE	•	•	-
GSA32/25UE	•	_	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
0.025	10.0	17.0	29	2
0.050	10.0	17.5	94	4
0.1	10.0	18.0	200	6
0.2	11.0	18.5	220	12
0.3	11.0	19.5	>220	16
0.5	12.0	21.0	>220	21
1.0	14.0	24.0	>220	27

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

#### Pressure drop at Vn:

≤2.5 mbar

#### **Installation position:**

Deviation of -30° to +90° from the horizontal position permitted.

#### Overflow volume (UE type):

GS32/25UE ≤38 l/h at 0.1 bar

#### **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

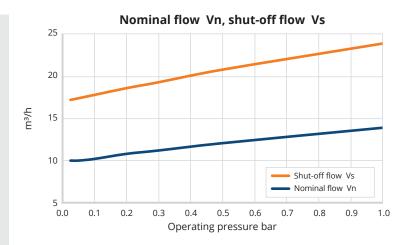
#### Certifications/test basis:

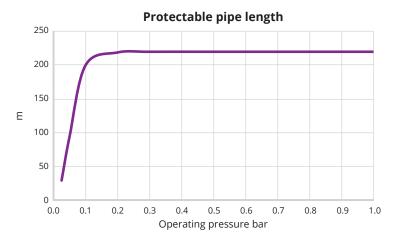
EU-DE DVGW G 5305-2 (0.025-1.0 bar) EU-AT ÖVGW QS-G 494 (0.025-0.1 bar)



#### Note:

For further information, see "Explanations on the product data sheets".





## Pipelife Gas-Stop™ GS50/25UE

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>50/DN40





Operating pressure: 0.025-1.0 bar (0.0025-0.1 MPa)

Colour code: Blue

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS50/25UE	•	•	-
GSA50/25UE	•	-	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
0.025	25.0	41.5	72	12
0.050	25.0	42.0	97	10
0.1	25.0	43.0	>100	16
0.2	27.0	45.0	>100	30
0.3	29.0	46.5	>100	40
0.5	31.0	50.0	>100	55
1.0	36.0	58.0	>100	70

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

#### Pressure drop at Vn:

≤2.5 mbar

#### **Installation position:**

Deviation of -30° to +90° from the horizontal position permitted.

#### Overflow volume (UE type):

GS50/25UE ≤38 l/h at 0.1 bar

#### **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

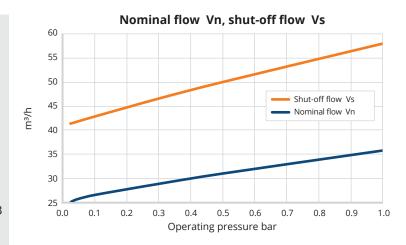
#### Certifications/test basis:

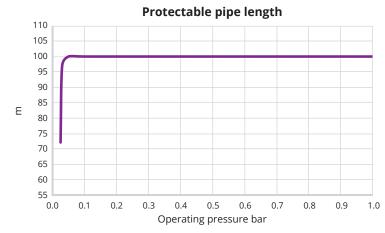
EU-DE DVGW G 5305-2 (0.025-1.0 bar) EU-AT ÖVGW QS-G 494 (0.025-0.1 bar)



#### Note:

For further information, see "Explanations on the product data sheets".





## Pipelife Gas-Stop™ GS63/25UE

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>63/DN50





Operating pressure: 0.025-1.0 bar (0.0025-0.1 MPa)

Colour code: Blue

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/25UE	•	•	-
GSA63/25UE	•	_	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
0.025	40.0	65.0	88	5
0.050	40.0	66.0	200	15
0.1	40.0	67.5	220	25
0.2	43.0	70.5	>220	45
0.3	45.0	73.0	>220	60
0.5	48.0	78.5	>220	80
1.0	55.0	90.5	>220	110

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

#### Pressure drop at Vn:

≤2.5 mbar

#### **Installation position:**

Deviation of -30° to +90° from the horizontal position permitted.

#### Overflow volume (UE type):

GS63/25UE ≤38 l/h at 0.1 bar

#### **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

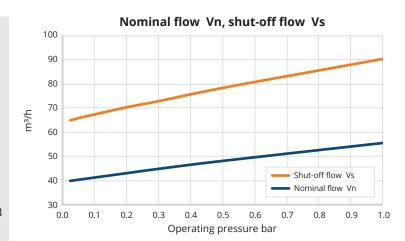
#### Certifications/test basis:

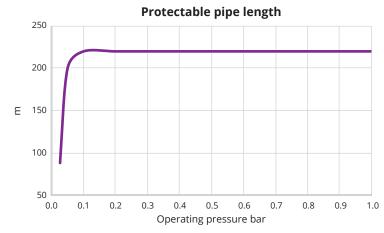
EU-DE DVGW G 5305-2 (0.025-1.0 bar) EU-AT ÖVGW QS-G 494 (0.025-0.1 bar)



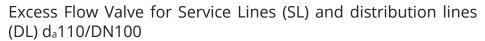
#### Note:

For further information, see "Explanations on the product data sheets".





## Pipelife Gas-Stop™ GS110/30UE







Operating pressure: 0.03-1.0 bar (0.003-0.1 MPa)

Colour code: Blue

#### **Product code**

1 Todact code		
	Automatic reopening	Integd in PE100 adapter
GSA110/30UE	•	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length SDR 17 m	Reopening time sec/m
0.03	120.0	192.0	210	27
0.05	120.0	194.0	630	54
0.1	124.0	198.0	>700	90
0.5	144.5	231.5	>700	290
1.0	166.5	267.0	>700	387

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

#### Pressure drop at Vn: ≤3.5 mbar

#### **Installation position:**

Deviation of  $\pm 10^{\circ}$  from the horizontal position permitted.

#### Overflow volume (UE type):

GSA110/30UE ≤38 l/h at 0.1 bar

#### Protectable pipe length (SL):

Guide values according to DVGW G 5305-2, Annex B; Pipe roughness k = 0.05 mm, but leak size ∅ 50 mm (VL on request)

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

#### Certifications/test basis:

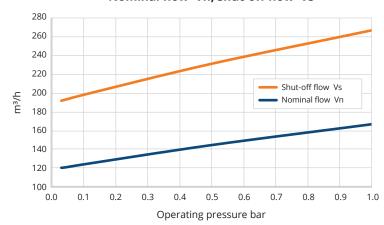
EU-DE DVGW G 5305-2 (0.03-1.0 bar) EU-AT ÖVGW QS-G 494 (0.03-0.1 bar)



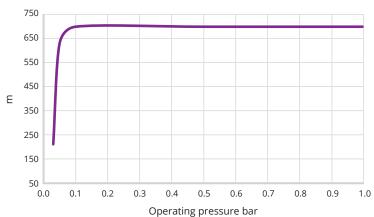
#### Note:

For further information, see "Explanations on the product data sheets". Information on installation in service line of other dimensions is available on request.

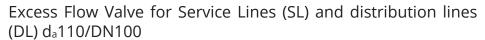
#### Nominal flow Vn, shut-off flow Vs



#### Protectable pipe length



## Pipelife Gas-Stop™ GS110/30UE/ZV







Operating pressure: 0.03-1.0 bar (0.003-0.1 MPa)

Colour code: BLUE

#### **Product code**

1 Todact coac		
	Automatic reopening	Integd in PE100 adapter
GSA110/30UE/ZV	•	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length SDR 17 m	Reopening time sec/m
0.03	140.0	190.0	285	27
0.05	142.0	193.0	617	54
0.1	145.0	197.0	950	90
0.5	170.0	233.0	>1000	290
1.0	196.0	265.0	>1000	387

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤3.0 mbar

**Installation position:** Deviation of ±5° from

the horizontal position permitted.

#### Overflow volume (UE type):

GSA110/30UE/ZV ≤38 l/h at 0.1 bar

#### Protectable pipe length (SL):

Guide values according to DVGW G 5305-2, Annex B; Pipe roughness k = 0.05 mm, but leak size  $\varnothing$  50 mm (VL on request)

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m<sup>3</sup> at 1013.25 mbar, 0° C

#### Certifications/test basis:

EU-DE DVGW G 5305-2 (0.03-1.0 bar) EU-AT ÖVGW QS-G 494 (0.03-0.1 bar)\*



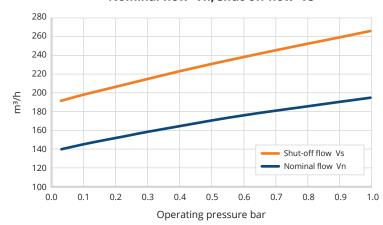


#### Note:

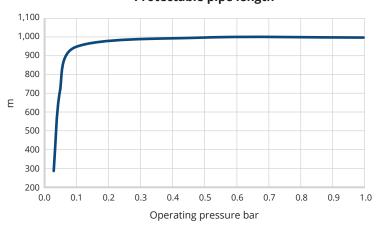
\* V<sub>nmax.</sub> 120.0–166.5 m³/h (Δp 2.0 mbar) For further information, see "Explanations on the product data sheets".

Information on installation in service line of other dimensions is available on request.

#### Nominal flow Vn, shut-off flow Vs



#### Protectable pipe length



## Pipelife Gas-Stop™ GS32/35(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>32/DN25





Operating pressure: 0.035-5.0 bar (0.0035-0.5 MPa)

Colour code: Violet

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS32/35	-	•	-
GSA32/35	-	-	•
GS32/35UE	•	•	-
GSA32/35UE	•	-	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time
0.035	16.0	27.0	14	7
0.050	16.0	27.5	31	13
0.1	16.5	28.0	87	24
0.3	18.0	30.0	>100	45
0.5	19.0	32.5	>100	55
1.0	22.0	37.5	>100	70
2.0	27.0	46.0	>100	85
3.0	31.5	53.0	>100	91
4.0	35.0	59.0	>100	97
5.0	38.0	65.0	>100	100

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤3.0 mbar

**Installation position:** Deviations of -30° to +90° from the horizontal position permitted.

#### Leak, overflow volume (UE type):

GS32/35 max. 3.8 l/h

GS32/35UE ≤38 l/h at 1.0 bar

#### **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in  $kg/m^3$  at 1013.25 mbar, 0° C

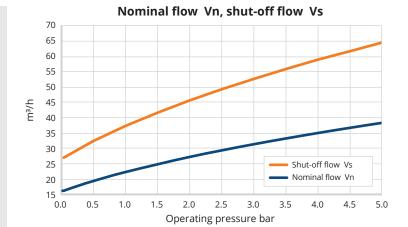
#### **Certifications:**

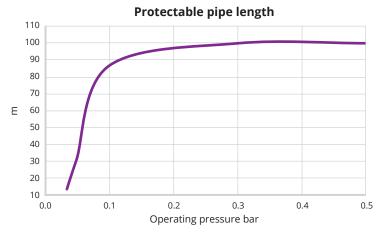
EU-DE DVGW G 5305-2 EU-AT ÖVGW QS-G 494





**Note:** For further information, see "Explanations on the product data sheets".





## Pipelife Gas-Stop™ GS50/35(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>50/DN40





Operating pressure: 0.035-5.0 bar (0.0035-0.5 MPa)

Colour code: Violet

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS50/35	-	•	-
GSA50/35	-	_	•
GS50/35UE	•	•	-
GSA50/35UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Pipe length that can be protected m	Reopening time sec/m
0.035	38.0	56.0	50	18
0.050	38.0	56.5	91	32
0.1	39.0	58.0	>100	58
0.3	42.5	63.0	>100	112
0.5	45.5	67.5	>100	140
1.0	52.5	78.0	>100	170
2.0	64.0	95.0	>100	205
3.0	74.0	110.0	>100	225
4.0	83.0	123.0	>100	240
5.0	91.0	134 5	>100	250

50

40

0.0

0.5

1.0

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \, \text{kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤2.5 mbar

**Installation position:** Deviations of -30° to +90° from the horizontal position permitted.

#### Leak, overflow volume (UE type):

GS50/35 max. 3.8 l/h GS50/35UE ≤38 l/h at 1.0 bar

#### Protectable pipe length:

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in  $kg/m^3$  at 1013.25 mbar, 0° C

#### **Certifications:**

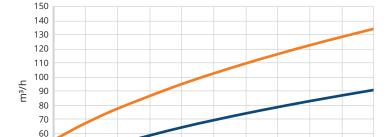
EU-DE DVGW G 5305-2 EU-AT ÖVGW QS-G 494



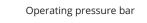


**Note:** For further information, see "Explanations on the product data sheets".

Information on installation in service line of other dimensions is available on request.



Nominal flow Vn, shut-off flow Vs



3.0

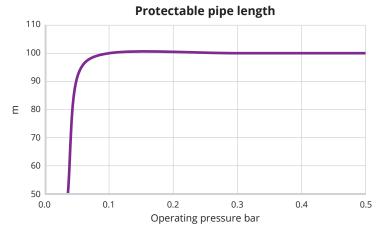
Shut-off flow Vs

Nominal flow Vn

4.0

4.5

5.0



## Pipelife Gas-Stop™ GS63/35(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>63/DN50





Operating pressure: 0.035-5.0 bar (0.0035-0.5 MPa)

Colour code: Violet

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/35	-	•	-
GSA63/35	-	_	•
GS63/35UE	•	•	-
GSA63/35UF	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Pipe length that can be protected m	Reopening time
0.035	58.0	87.0	75	28
0.050	58.5	87.5	131	52
0.1	60.0	90.0	200	95
0.3	65.0	97.5	>210	176
0.5	70.0	105.0	>210	215
1.0	80.5	121.0	>210	270
2.0	98.5	148.0	>210	325
3.0	114.0	171.0	>210	355
4.0	127.0	191.0	>210	375
5.0	140.0	209.0	>210	395

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤2.0 mbar

**Installation position:** Deviations of -30° to +90° from the horizontal position permitted.

#### Leak, overflow volume (UE type):

GS63/35 max. 3.8 l/h GS63/35UE ≤38 l/h at 1.0 bar

#### **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in  $kg/m^3$  at 1013.25 mbar, 0° C

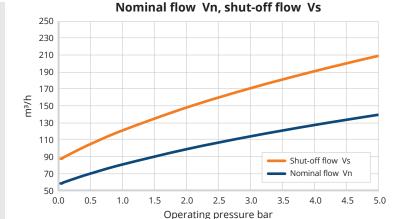
#### **Certifications:**

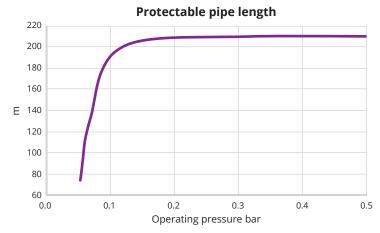
EU-DE DVGW G 5305-2 EU-AT ÖVGW QS-G 494





**Note:** For further information, see "Explanations on the product data sheets".





## Pipelife Gas-Stop™ GS32/50UE

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>32/DN25





Operating pressure: 0.05-0.4 bar (0.005-0.04 MPa)

Colour code: **Grey** 

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter	
GS32/50UE	•	•	-	
GSA32/50UE	•	_	•	

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time
0.05	15.0	27.0	35	Δ
0.10	15.5	27.5	91	6
0.20	16.5	28.5	198	12
0.30	18.0	30.0	300	16
0.40	19.0	31.0	395	19

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤3.0 mbar

#### **Installation position:**

Deviations of +45° to -45° from the horizontal position permitted.

#### **Overflow volume:**

GS32/50UE ≤80 l/h at 0.4 bar

#### **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

#### **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

#### **Certifications/test basis:**

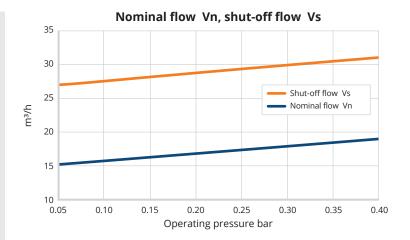
EU-E GNF ES.00212.GN-DG

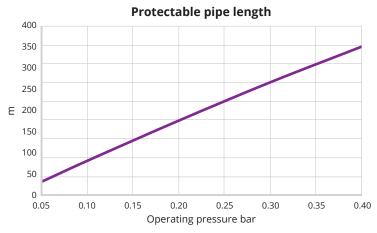




#### Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS63/50UE

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>63/DN50





Operating pressure: 0.05-0.4 bar (0.005-0.04 MPa)

Colour code: Grey

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/50UE	•	•	-
GSA63/50UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Pipe length that can be protected m	Reopening time sec/m
0.05	50.0	90.0	111	15
0.10	51.5	92.0	284	25
0.20	54.5	96.0	570	45
0.30	57.0	100.0	600	60
0.40	60.0	104.0	>600	72

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤2.0 mbar

# **Installation position:**

Deviations of +45° to -45° from the horizontal position permitted.

### **Overflow volume:**

GS63/50UE ≤80 l/h at 0.4 bar

# **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

## Certifications/test basis:

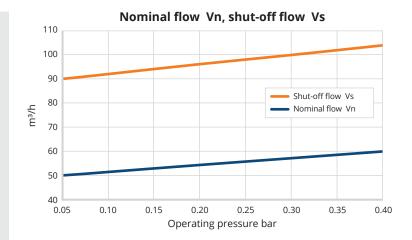
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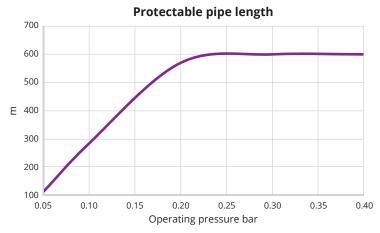




# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS25/200(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>25/DN20





Operating pressure: 0.2-5.0 bar (0.02-0.5 MPa)

Colour code: Red

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS25/200	-	•	-
GSA25/200	-	-	•
GS25/200UE	•	•	-
GSA25/200UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time sec/m
0.2	18.0	23.5	48	20
0.5	20.0	26.5	132	30
1.0	23.5	30.5	255	38
2.0	28.5	37.0	390	45
3.0	33.0	43.0	>400	50
4.0	37.0	48.0	>400	52
5.0	40.0	53.0	>400	55

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \, \text{kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤15.0 mbar

# **Installation position:**

All installation positions permitted.

# Leak, overflow volume (UE type):

GS25/200 max. 3.8 l/h GS25/200UE ≤38 l/h at 1.0 bar

# **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu$  = 0.6

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m<sup>3</sup> at 1013.25 mbar, 0° C

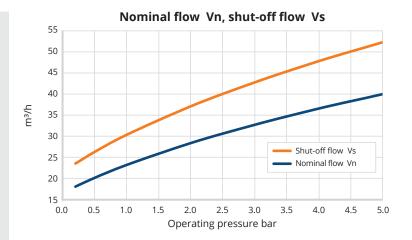
# **Certifications/test basis:**

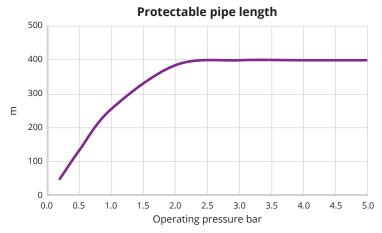
EU-AT ÖVGW QS-G 494



# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS32/200(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>32/DN25





**Operating pressure: 0.2-5.0 bar (0.02-0.5 MPa)** 

Colour code: Red

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS32/200	-	•	-
GSA32/200	-	-	•
GS32/200UE	•	•	-
GSA32/200UE	•	_	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
0.2	36.0	58.0	35	38
0.3	37.0	60.0	60	45
0.5	40.0	65.0	110	55
1.0	46.0	75.0	220	70
2.0	56.0	92.0	380	85
3.0	65.0	108.0	400	91
4.0	73.0	120.0	>400	97
5.0	80.0	130.0	>400	100

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $pn = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤12.0 mbar

# **Installation position:**

All installation positions permitted.

## Leak, overflow volume (UE type):

GS32/200 max. 3.8 l/h GS32/200UE ≤38 l/h at 1.0 bar

# **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

## **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

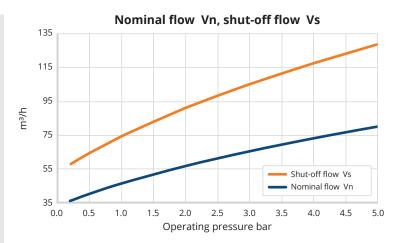
# Certifications/test basis:

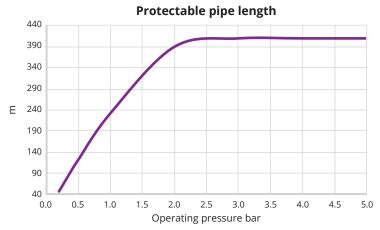
EU-DE DVGW G 5305-2 EU-AT ÖVGW QS-G 494



# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS50/200(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>50/DN40





Operating pressure: 0.2-5.0 bar (0.02-0.5 MPa)

Colour code: Red

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS50/200	-	•	-
GSA50/200	-	-	•
GS50/200UE	•	•	-
GSA50/200UE	•	_	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
0.2	110.0	157.5	36	92
0.5	121.0	176.5	146	140
1.0	140.0	202.5	307	170
2.0	171.0	248.0	480	205
3.0	197.5	286.5	>500	225
4.0	220.5	320.0	>500	240
5.0	240.0	350.5	>500	250

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at  $0^{\circ}$  C, 1013.25 mbar.

Pressure drop at Vn: ≤15.0 mbar

# **Installation position:**

All installation positions permitted.

# Leak, overflow volume (UE type):

GS50/200 max. 3.8 l/h GS50/200UE ≤38 l/h at 1.0 bar

# **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

# Certifications/test basis:

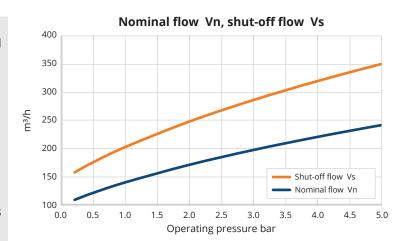
EU-DE DVGW G 5305-2 EU-AT ÖVGW QS-G 494

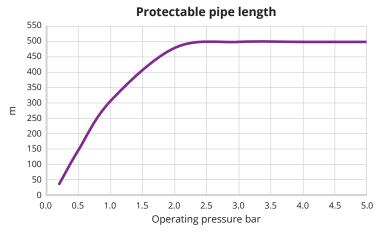




#### Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS63/200(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>63/DN50





Operating pressure: 0.2-5.0 bar (0.02-0.5 MPa)

Colour code: Red

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/200	-	•	-
GSA63/200	-	-	•
GS63/200UE	•	•	-
GSA63/200UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time
0.2	180.0	240.0	57	145
0.5	200.0	268.0	214	215
1.0	231.5	309.5	472	270
2.0	283.5	378.5	848	325
3.0	328.0	436.5	900	355
4.0	366.0	488.0	>900	375
5.0	400.0	534.5	>900	395

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤15.0 mbar

# Installation position:

All installation positions permitted.

# Leak, overflow volume (UE type):

GS63/200 max. 3.8 l/h GS63/200UE ≤38 l/h at 1.0 bar

# **Protectable pipe length:**

Guide values according to DVGW G 5305-2, Annex B

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m<sup>3</sup> at 1013.25 mbar, 0° C

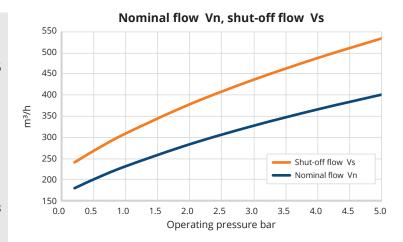
# Certifications/test basis:

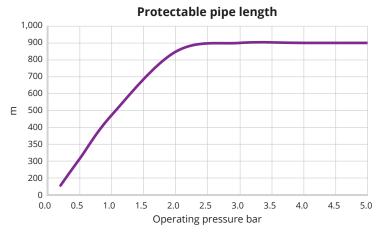
EU-DE DVGW G 5305-2 EU-AT ÖVGW QS-G 494



# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS63/200UE/100

Excess Flow Valve for Service Lines (SL) d₀63/DN50





Operating pressure: 0.2-0.4 bar (0.02-0.04 MPa)

Colour code: Red

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/200UE/100	•	•	-
GSA63/200UE/100	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time
0.20	100.0	155.0	230	45
0.25	100.0	157.5	295	55
0.30	100.0	160.5	360	60
0.35	100.0	163.5	420	67
0.40	100.0	167.0	480	72

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) and overflow volume are applicable, for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at  $0^{\circ}$  C, 1013.25 mbar.

**Pressure drop at Vn:** ≤5.0 mbar

# **Installation position:**

All installation positions permitted.

# Overflow volume (UE type):

GS63/200UE/100 ≤80 l/h at 0.4 bar

# Protectable pipe length:

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# Correction factor for other gases:

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

# **Certifications/test basis:**

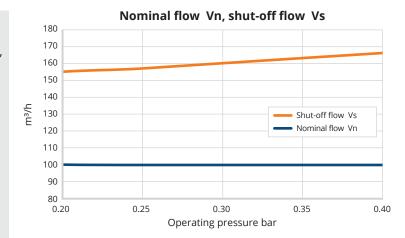
EU-E GNF ES.00212.GN-DG

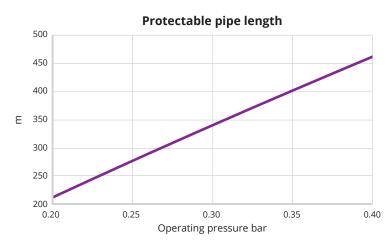




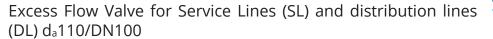
# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS110/200(UE)







Operating pressure: 0.2-5.0 bar (0.02-0.5 MPa)

Colour code: Red

## **Product codes**

	Automatic reopening	Integd in PE100 adapter
GSA110/200	-	•
GSA110/200UE	•	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs		e pipe length m	Reopening time
bar	m³/h	m³/h	SDR 11	<b>SDR 17</b>	min/m
0.2	484.0	688.0	91	161	8
0.5	565.0	761.0	476	763	12
1.0	686.0	972.0	871	1542	15
2.0	881.0	1110.0	1836	2840	18
3.0	1026.0	1285.5	2647	3900	20
4.0	1140.0	1433.0	3468	4000	23
5.0	1244.0	1566.0	4000	4000	25

# Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $pn = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤25.0 mbar

**Installation position:** Deviation of ±10° from the horizontal position permitted.

# Leak, overflow volume (UE type):

GS110/200 max. 3.8 l/h GS110/200UE ≤38 l/h at 1.0 bar

## Protectable pipe length (SL):

Guide values according to DVGW G 5305-2, Annex B; pipe roughness k = 0.05 mm, but leak size  $\varnothing$  50 mm (VL on request)

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m<sup>3</sup> at 1013.25 mbar, 0° C

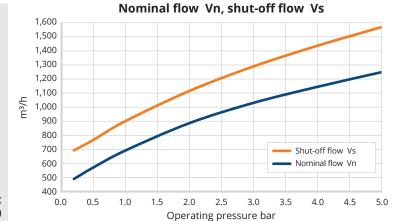
## **Certifications/test basis:**

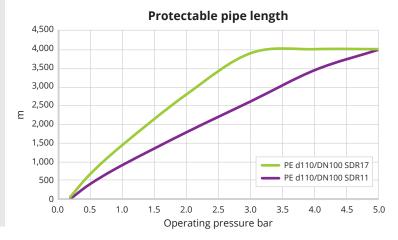
EU-DE DVGW G 5305-2 EU-AT ÖVGW QS-G 494





**Note:** For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS20/500(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>20/DN15





Operating pressure: **0.5-5.0** bar **(0.05-0.5** MPa)

Colour code: Orange

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS20/500	-	•	-
GSA20/500	-	-	•
GS20/500UE	•	•	-
GSA20/500UE	•	_	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
0.5	15.0	24.0	30	16
1.0	17.0	27.0	63	21
2.0	21.0	34.0	119	25
3.0	24.0	40.0	172	27
4.0	27.0	44.0	230	29
5.0	30.0	47.0	291	30

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤35.0 mbar

**Installation position:** All installation positions permitted.

# Leak, overflow volume (UE type):

GS20/500 max. 3.8 l/h GS20/500UE ≤38 l/h at 1.0 bar

# **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

## Certifications/test basis:

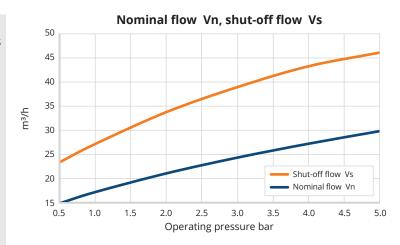
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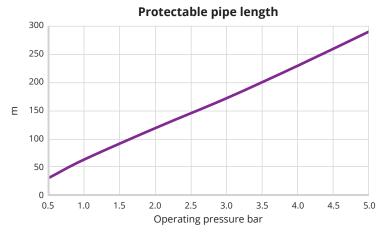




# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS25/500(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>25/DN20





Operating pressure: **0.5-5.0** bar **(0.05-0.5** MPa)

Colour code: Orange

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS25/500	-	•	-
GSA25/500	_	-	•
GS25/500UE	•	•	-
GSA25/500UE	•	_	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
0.5	20.0	26.5	132	30
1.0	23.5	30.5	255	38
2.0	28.5	37.0	390	45
3.0	33.0	43.0	>400	50
4.0	37.0	48.0	>400	52
5.0	40.0	53.0	>400	55

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤15.0 mbar

**Installation position:** All installation positions permitted.

## Leak, overflow volume (UE type):

GS25/500 max. 3.8 l/h

GS25/500UE ≤38 l/h the at 1.0 bar

# **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

## Certifications/test basis:

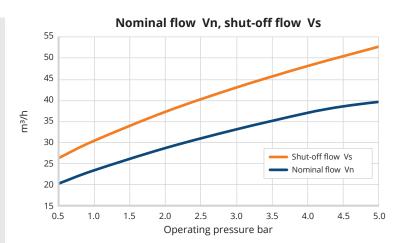
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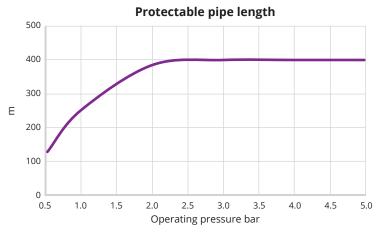




# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS32/500(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>32/DN25





Operating pressure: **0.5-5.0** bar **(0.05-0.5** MPa)

Colour code: Orange

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS32/500	-	•	-
GSA32/500	_	-	•
GS32/500UE	•	•	-
GSA32/500UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time sec/m
0.5	100.0	145.0	12	55
1.0	116.5	175.5	29	70
2.0	144.0	217.0	62	85
3.0	166.5	250.0	95	91
4.0	187.0	277.0	129	97
5.0	205.0	300.0	164	100

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤65.0 mbar

**Installation position:** All installation positions permitted.

# Leak, overflow volume (UE type):

GS32/500 max. 3.8 l/h GS32/500UE ≤38 l/h at 1.0 bar

# **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

# Certifications/test basis:

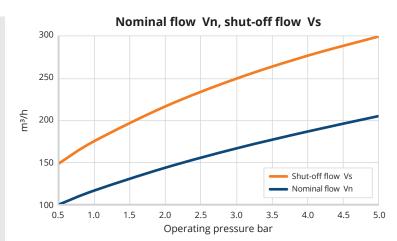
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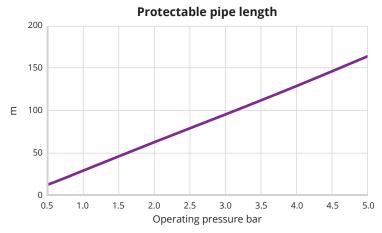




# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS63/500(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>63/DN50





Operating pressure: 0.5-5.0 bar (0.05-0.5 MPa)

Colour code: Orange

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/500	-	•	-
GSA63/500	_	-	•
GS63/500UE	•	•	-
GSA63/500UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time sec/m
0.5	200.0	268.0	226	215
1.0	231.5	309.5	455	270
2.0	283.5	378.5	860	325
3.0	328.0	436.5	900	355
4.0	366.0	488.0	900	375
5.0	400.0	534.5	>900	395

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤15.0 mbar

**Installation position:** All installation positions permitted.

#### Leak, overflow volume:

GS63/500 max. 3.8 l/h GS63/500UE ≤38 l/h at 1.0 bar

# **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m<sup>3</sup> at 1013.25 mbar, 0° C

## Certifications/test basis:

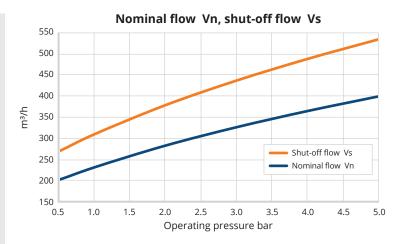
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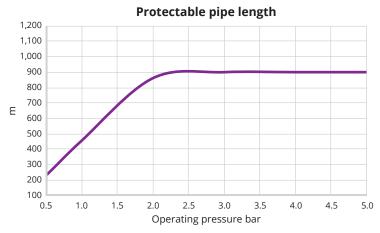




# Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS20/1(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>20/DN15





Operating pressure: 1.0-5.0 bar (0.1-0.5 MPa)

Colour code: Yellow

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd in PE100 adapter
GS20/1	-	•	-
GSA20/1	_	_	•
GS20/1UE	•	•	-
GSA20/1UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length m	Reopening time sec/m
1.0	25.0	45.0	8	21
2.0	30.5	61.0	24	25
3.0	35.0	75.0	36	27
4.0	40.0	88.0	47	29
5.0	43.5	98.0	57	30

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $pn = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤60.0 mbar

**Installation position:** All installation positions permitted.

# Leak, overflow volume (UE type):

GS20/1 max. 3.8 l/h\* GS20/1UE ≤38 l/h at 1.0 bar

## **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in  $kg/m^3$  at 1013.25 mbar,  $0^{\circ}$  C

## Certifications/test basis:

EU-AT ÖVGW QS-G 494

EU-F Règlement NF 136 SAPE 102 ( $Vn_{max}$  25  $m^3/h$ ) EU-F Certigaz APE H001-00

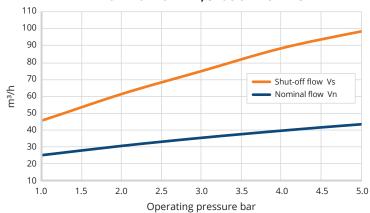


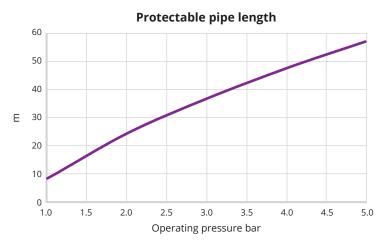
# Note:

\* EU-F licensing for Pipelife Gas-Stop™ integd in pressure-tapping valves; permitted leak ≤0.15 l/h. For further information, see "Explanations on the product data sheets".

Information on installation in service line of other dimensions is available on request.

# Nominal flow Vn, shut-off flow Vs





# Pipelife Gas-Stop™ GS32/1(UE)

Excess Flow Valve for Service Lines (SL) d<sub>3</sub>32/DN25





Operating pressure: 1.0-5.0 bar (0.1-0.5 MPa)

Colour code: Yellow

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS32/1	-	•	-
GSA32/1	-	-	•
GS32/1UE	•	•	-
GSA32/1UE	•	_	•

#### Technical data

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
1.0	100.0	200.0	10	70
2.0	117.5	243.5	41	85
3.0	135.0	274.5	71	91
4.0	151.5	303.0	101	97
5.0	166.0	332.0	127	100

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3 \text{ at } 0^{\circ} \text{ C}, \dot{10}13.25 \text{ mbar.}$ 

Pressure drop at Vn: ≤40.0 mbar

**Installation position:** All installation positions permitted.

# Leak, overflow volume (UE type):

max. 3.8 l/h\* GS32/1 GS32/1UE ≤38 l/h at 1.0 bar

## **Protectable pipe length:**

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

## **Certifications/test basis:**

EU-AT ÖVGW QS-G 494

EU-F Règlement NF 136 SAPE 102 (Vn<sub>max</sub> 100 m<sup>3</sup>/h) EU-F Certigaz APE H002-00



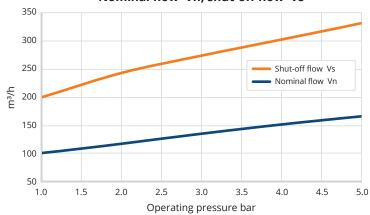


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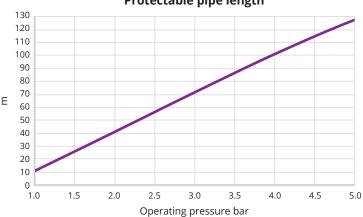
\* EU-F licensing for Pipelife Gas-Stop™ integd in pressure-tapping valves; permitted leak ≤0.15 l/h. For further information, see "Explanations on the product data sheets".

Information on installation in service line of other dimensions is available on request.

# Nominal flow Vn, shut-off flow Vs



# Protectable pipe length



# Pipelife Gas-Stop™ GS63/1(UE)

Excess Flow Valve for Service Lines (SL) d<sub>a</sub>63/DN50





Operating pressure: 1.0-5.0 bar (0.1-0.5 MPa)

Colour code: Yellow

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd PE100/SDR11 adapter
GS63/1	-	•	-
GSA63/1	-	-	•
GS63/1UE	•	•	-
GSA63/1UE	•	_	•

## **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe length	Reopening time
bar	m³/h	m³/h	m	sec/m
1.0	180	240	781	270
2.0	220	293	1462	325
3.0	255	338	1920	355
4.0	285	378	>2000	375
5.0	310	414	>2000	395

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar.

Pressure drop at Vn: ≤15.0 mbar

**Installation position:** All installation positions permitted.

# Leak, overflow volume (UE type):

GS63/1 max. 3.8 l/h GS63/1UE ≤38 l/h at 1.0 bar

# Protectable pipe length:

Guide values for a leak size of 70 % of the pipe cross-section, pipe roughness k = 0.05 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

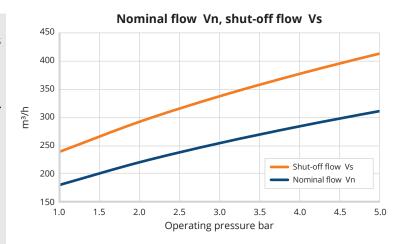
# Certifications/test basis:

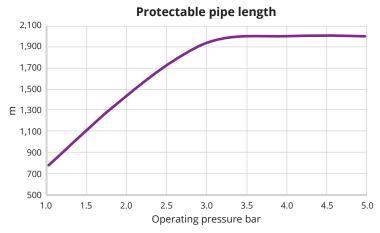
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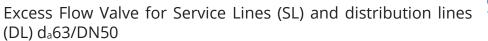
#### Note:

For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS63/300(UE)







Operating pressure: 0.3-10.0 bar (0.03-1.0 MPa)

Colour code: White

#### **Product codes**

	Automatic reopening	Sepa mounting part	Integd in PE100 adapter
GSA63/300	-	-	•
GSA63/300UE	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Pipe length that can be protected AL + VAL SDR11/m	Reopening time sec/m
0.3	200.0	262.0	55	32
0.5	215.0	281.0	117	43
1.0	248.0	324.0	254	58
2.0	304.0	397.0	493	73
3.0	351.0	458.0	716	81
4.0	392.5	512.0	931	88
5.0	430.0	561.0	1144	92
6.0	465.0	605.0	1354	96
8.0	527.0	686.0	1771	102
10.0	583.0	759.0	2186	107

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H, pn =  $0.74 \text{ kg/m}^3$  at  $0^\circ$  C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤20.0 mbar

**Installation position:** All installation positions permitted.

Leak, overflow volume (UE type):

GSA63/300 max. 3.8 l/h at  $p_{max}$ . 5.0 bar GSA63/300UE  $\leq$ 550 l/h at 5.0 bar

≤1.000 l/h at 10.0 bar

# Protectable pipe length:

Guide values for a leak size  $\varnothing$  30 mm,

Pipe roughness k = 0.3 mm, discharge coefficient  $\mu$ = 0.6

**Correction factor for other gases:** 

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

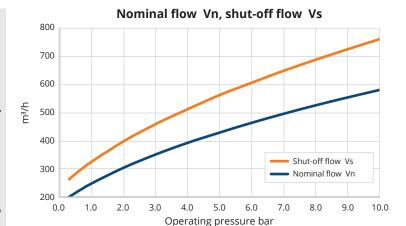
pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

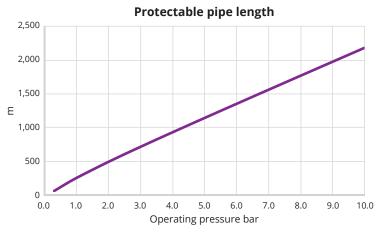
# Certifications/test basis:

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**Note:** For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS63/300(UE)S

Excess Flow Valve for Service Lines (SL) and distribution lines (DL) d<sub>8</sub>63/DN50





Operating pressure: 0.3-10.0 bar (0.03-1.0 MPa)

Colour code: White

## **Product codes**

	Automatic reopening	Sepa mounting part	Integd in PE100 adapter
GSA63/300S	•	-	•
GSA63/300UE/S	•	_	•

#### **Technical data**

Operating pressure pe bar	Nominal flow Vn m³/h	Shut-off flow Vs m³/h	Protectable pipe length AL + VAL SDR11/m	Reopening time sec/m
0.3	255.0	382.0	5	32
0.5	273.5	410.0	27	43
1.0	315.5	473.0	90	58
2.0	386.0	578.5	199	73
3.0	446.0	667.5	300	81
4.0	498.0	746.0	397	88
5.0	545.5	817.5	494	92
6.0	589.0	883.0	593	96
8.0	668.0	1000.0	789	102
10.0	738.5	1106.0	985	107

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $pn = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤25.0 mbar

**Installation position:** All installation positions permitted.

Leak, overflow volume (UE type):

GSA63/300S max. 3.8 l/h at  $p_{max}$ . 5.0 bar GSA63/300UE/S  $\leq$ 550 l/h at 5.0 bar  $\leq$ 1.000 l/h at 10.0 bar

Protectable pipe length:

Guide values for a leak size Ø 30 mm,

Pipe roughness k = 0.3 mm, discharge coefficient  $\mu$ = 0.6

Correction factor for other gases: 
$$\frac{10.74}{0.74}$$

f = Correction factor

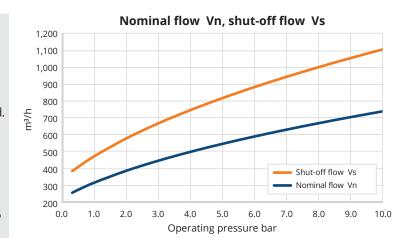
pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

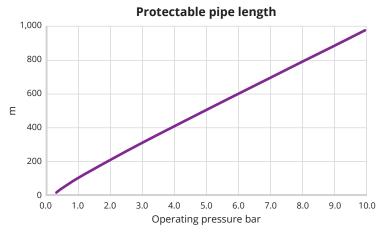
# Certifications/test basis:

EU-AT ÖVGW QS-G 494

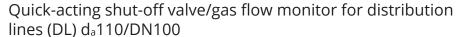


**Note:** For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS110/150UE







Operating pressure: 0.15-10.0 bar (0.015-1.0 MPa)

Colour code: Red

#### **Product code**

1 Todact code		
	Automatic reopening	Integd in PE100 adapter
GSA110/150UE	•	•

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs		e pipe length m	Reopening time
bar	m³/h	m³/h	SDR 11	SDR 17	min/m
0.15	415	520.0	102	158	1.5
0.5	470	633.5	502	779	2.6
1.0	540	751.5	955	1484	3.5
2.0	650	927.0	1778	2763	4.4
3.0	730	1060.0	2623	3900	5.0
4.0	795	1160.5	3526	4000	5.3
5.0	850	1248.0	>4000	4000	5.6
6.0	895	1334.0	>4000	-	6.0
8.0	965	1502.5	>4000	-	6.2
10.0	1010	1632.5	>4000	_	6.5

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤25.0 mbar

**Installation position:** Deviation of ±5° from

the horizontal position permitted. **Leak**, **overflow volume** (**UE type**):

GSA110/150UE ≤550 l/h at 5.0 bar

≤1.000 l/h at 10.0 bar

#### Protectable pipe length:

Guide values for leak size  $\varnothing$  50 mm, Pipe roughness k = 0.3 mm, discharge coefficient  $\mu$ = 0.6

**Correction factor for other gases:** 

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

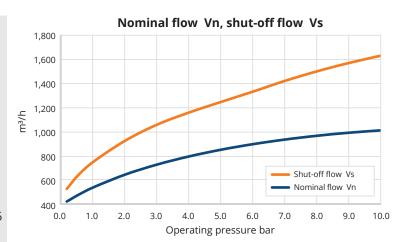
pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

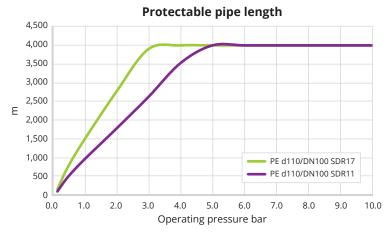
# Certifications/test basis:

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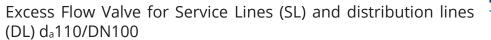


**Note:** For further information, see "Explanations on the product data sheets".





# Pipelife Gas-Stop™ GS110/300(UE)







Operating pressure: 0.3-10.0 bar (0.03-1.0 MPa)

Colour code: White

#### **Product codes**

	Automatic reopening	Integd in PE100 adapter
GSA110/300	-	•
GSA110/300UE	•	•

### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs		e pipe length m	Reopening time
bar	m³/h	m³/h	SDR 11	SDR 17	min/m
0.3	540.0	754.0	101	155	2.0
0.5	590.0	825.5	231	355	2.6
1.0	695.5	976.0	504	780	3.5
2.0	870.5	1225.0	955	1480	4.4
3.0	1018.5	1435.0	1357	2100	5.0
4.0	1149.0	1620.0	1737	2700	5.3
5.0	1267.5	1788.0	2104	3240	5.6
6.0	1376.5	1942.5	2462	3830	6.0
8.0	1575.0	2223.5	3161	-	6.2
10.0	1753.0	2476.0	3857	-	6.5

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $\rho n = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤30.0 mbar

**Installation position:** Deviation of ±5° from the horizontal position permitted.

Leak, overflow volume (UE type):

GSA110/300 max. 3.8 l/h at  $p_{max}$ . 5.0 bar GSA110/300UE  $\leq$ 550 l/h at 5.0 bar  $\leq$ 1.000 l/h at 10.0 bar

# **Protectable pipe length:**

Guide values for a leak size  $\varnothing$  50 mm, pipe roughness k = 0.3 mm, discharge coefficient  $\mu$  = 0.6

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

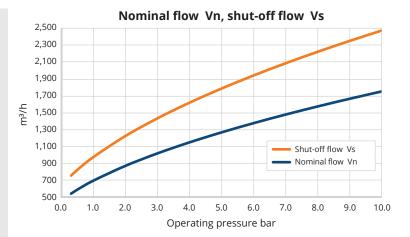
pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

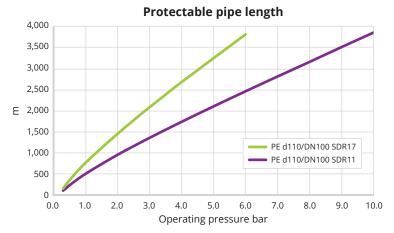
# **Certifications/test basis:**

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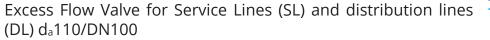


**Note:** For further information, see "Explanations on the product data sheets". Depending on the respective pipeline configuration, larger pipeline lengths that can be protected are possible. Details on this as well as information on installation in lines of other dimensions are available on request.





# Pipelife Gas-Stop™ GS110/300(UE)/S







Operating pressure: 0.3-10.0 bar (0.03-1.0 MPa)

Colour code: White

#### **Product codes**

oaact coacs		
	Automatic reopening	Integd in PE100 adapter
GSA110/300S	-	•
GSA110/300UE/S	•	•

### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs		e pipe length m	Reopening time
bar	m³/h	m³/h	SDR 11	SDR 17	min/m
0.3	657.0	828	54	84	2.0
0.5	717.5	906	160	250	2.6
1.0	848.5	1072	381	596	3.5
2.0	1063.5	1345	751	1168	4.4
3.0	1245.0	1575	1078	1677	5.0
4.0	1405.0	1780	1386	2156	5.3
5.0	1550.0	1965	1684	2620	5.6
6.0	1684.0	2136	1974	3071	6.0
8.0	1927.0	2447	2553	-	6.2
10.0	2145.0	2726	3120	-	6.5

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H, pn =  $0.74 \text{ kg/m}^3$  at  $0^{\circ}$  C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤45.0 mbar

**Installation position:** Deviation of ±5° from

the horizontal position permitted.

Leak , overflow volume (UE type):

GSA110/300S max. 3.8 l/h at  $p_{max}$ . 5.0 bar GSA110/300UE/S  $\leq$ 550 l/h at 5.0 bar

≤1.000 l/h at 10.0 bar

# **Protectable pipe length:**

Guide values for a leak size  $\varnothing$  50 mm, pipe roughness k = 0.3 mm, discharge coefficient  $\mu$  = 0.6

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

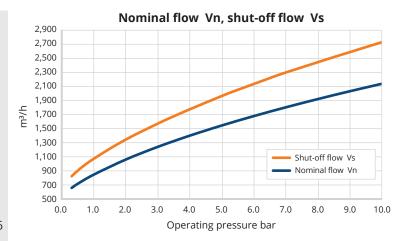
pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

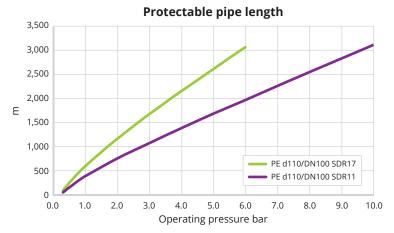
# **Certifications/test basis:**

EU-AT ÖVGW QS-G 494

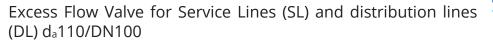


**Note:** For further information, see "Explanations on the product data sheets". Depending on the respective pipeline configuration, larger pipeline lengths that can be protected are possible. Details on this as well as information on installation in lines of other dimensions are available on request.





# Pipelife Gas-Stop™ GS110/1(UE)







**Operating pressure: 1.0-10.0 bar (0.1-1.0 MPa)** 

Colour code: White

## **Product codes**

	Automatic reopening	Integd in PE100 adapter		
GSA110/1	-	•		
GSA110/1UE	•	•		

#### **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs	Protectable pipe	length AL + VAL m	Reopening time
bar	m³/h	m³/h	SDR 11	SDR 17	min/m
1.0	1560.0	1753.0	45	69	3.5
2.0	1862.0	2167.0	167	260	4.4
3.0	2098.0	2518.0	293	456	5.0
4.0	2289.5	2827.0	415	647	5.3
5.0	2449.5	3104.5	539	839	5.6
6.0	2584.5	3357.5	664	1034	6.0
8.0	2801.0	3802.5	992	-	6.2
10.0	2963.5	4179.0	1196	_	6.5

#### Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $pn = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

Pressure drop at Vn: ≤85.0 mbar

**Installation position:** Deviation of ±5° from the

horizontal position permitted.

Leak , overflow volume (UE type):

GSA110/1 max. 3.8 l/h at p<sub>max</sub>. 5.0 bar GSA110/1UE ≤550 l/h at 5.0 bar ≤1.000 l/h at 10.0 bar

Protectable pipe length:

Guide values for leak size  $\varnothing$  50 mm,

Pipe roughness k = 0.3 mm, discharge coefficient  $\mu = 0.6$ 

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

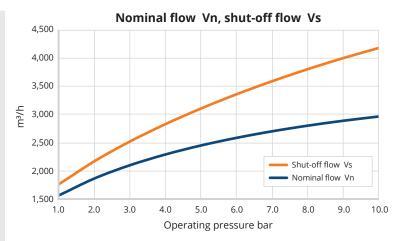
pn = Standard density of the other gas type in kg/m³ at 1013.25 mbar, 0° C

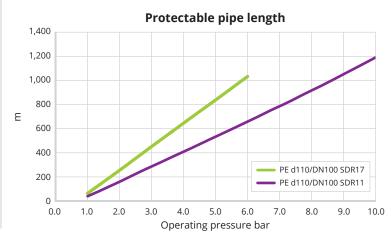
Certifications/test basis:

EU-AT ÖVGW QS-G 494



**Note:** For further information, see "Explanations on the product data sheets". Depending on the respective pipeline configuration, larger pipeline lengths that can be protected are possible. Details on this as well as information on installation in lines of other dimensions are available on request.





# Pipelife Gas-Stop™ GS110/1UE/ZV

Excess Flow Valve for Service Lines (SL) and distribution lines (DL) d<sub>a</sub>160/DN150





Operating pressure: 1.0-10.0 bar (0.1-1.0 MPa)

Colour code: White

#### **Product code**

	Automatic reopening	Integd in PE100 adapter
GSA110/1UE/ZV	•	•

## **Technical data**

Operating pressure pe	Nominal flow Vn	Shut-off flow Vs		pipe length n	Reopening time
bar	m³/h	m³/h	PE d160 SDR 11	PE d160 SDR 17	min/m
1.0	2000.0	2296	269	420	7.5
2.0	2594.0	2868	811	1268	9.5
3.0	3037.0	3406	1261	1971	10.5
4.0	3374.5	3866	1698	2655	11.2
5.0	3674.5	4284	2128	3328	11.8
6.0	3946.0	4671	2552	3992	12.3
8.0	4422.5	5373	3385	-	13.2
10.0	4833.0	6000	4000	_	13.8

## Flow values:

All data for nominal or shut-off flow (Vn, Vs) as well as leak and overflow volume are applicable for natural gas H,  $pn = 0.74 \text{ kg/m}^3$  at 0° C, 1013.25 mbar. Tolerance for shut-off flow +/-5 %.

**Pressure drop at Vn:** ≤65.0 mbar

**Installation position:** Max. ±5° from the horizontal installation position.

Leak , overflow volume (UE type):

GSA110/1UE/ZV ≤550 l/h at 5.0 bar ≤1.000 l/h at 10.0 bar

# Protectable pipe length:

Guide values for a leak size  $\emptyset$  60 mm, Pipe roughness k = 0.3 mm, discharge coefficient  $\mu$ = 0.6

# **Correction factor for other gases:**

$$f = \sqrt{\frac{0.74}{\rho n}}$$

f = Correction factor

pn = Standard density of the other gas type in kg/m<sup>3</sup> at 1013.25 mbar, 0° C

#### **Certifications/test basis:**

EU-AT ÖVGW QS-G 494



**Note:** For further information, see "Explanations on the product data sheets".

