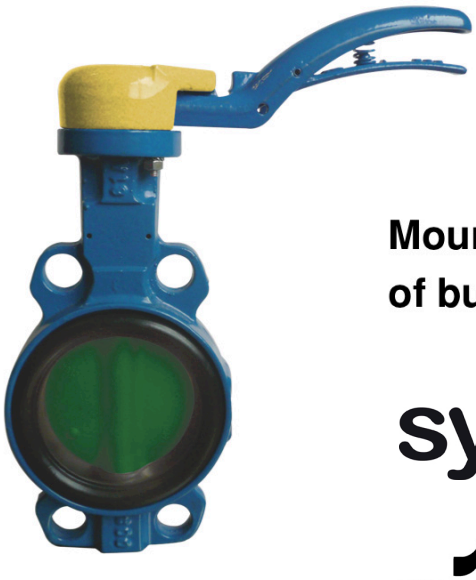


Mounting instructions of butterfly valves

sylax GAS

DVGW NF ROB-GAZ

This installation instruction is available in the official languages of the EC on our web site or by requesting our sales department:

Deze bijsluiter is op onze website in alle officiële talen van de Europese Gemeenschap beschikbaar of door eenvoudig verzoek aan onze verkoopafdeling

Die Einbauanleitung ist auf unserer website in allen offiziellen Sprachen der Europäischen Union verfügbar oder auf einfache Anfrage bei unserer Verkaufsabteilung erhältlich

Questa nota d' istruzione è disponibile nelle lingue ufficiali della Comunità Europea al nostro sito internet oppure tramite richiesta presso il nostro ufficio commerciale

Denne installationsvejledning er tilgængelig i EU's officielle sprog på vores hjemmeside eller ved henvendelse til vores salgsafdeling.

Detta dokument finns tillgängligt på vår internet sida i alla officiella språk inom EU på efterfrågen från vårt försäljningsavdelning.

Cette Notice d' Instruction est disponible dans les langues officielles de la Communauté Européenne sous notre site internet ou sur simple demande auprès de notre service commercial.

Este Manual de Instrucciones está disponible en los idiomas oficiales de la Comunidad Europea en nuestra página web o simplemente contactando con nuestro departamento de ventas.

Este Manual de Instruções está disponível nos idiomas oficiais da Comunidade Europeia no nosso site Internet ou simplesmente contactando o nosso departamento de vendas

Tämä asennus ohje on saatavilla kaikilla EU:n virallisilla kielillä joko internet-sivuiltamme tai pyytämällä myyntiosastoltamme.

Denne installasjonsinstruks er tilgjengelig på alle offisielle EU språk på våre internettsider eller ved å forespørre vår salgsavdeling.

Οι παρούσες οδηγίες εγκατάστασης διατίθενται στις επίσημες γλώσσες της Ευρωπαϊκής Κοινότητας στον ιστότοπό μας η μέσω απλής αίτησης από το τμήμα πωλήσεων μας.

http://www.socla.com

SYLAX GAS

Introduction

Before fitting the valve between flanges, make sure that the operating conditions are compatible with the details given on the identification plate, this instruction notice, the manufacturer's details (technical data sheet, price list) and the fluid being carried (nature of the fluid, temperature range etc).
Socla cannot be held responsible for the malfunctioning of the valve nor for damage or injury resulting from failure to respect these details.

European Directives

Our butterfly valves subject to directives are the object of statements of conformity available from our sales department.
Our Sylax gas butterfly valves conform to an european Directive if Socla is able to provide a statement of Conformity about this Directive and this product reference.

- **Directive 97/23/CE (Equipments under Pressure)**

Our Sylax gas butterfly valves conform to the Equipment under Pressure directive 97/23/CE in **category I & II**.

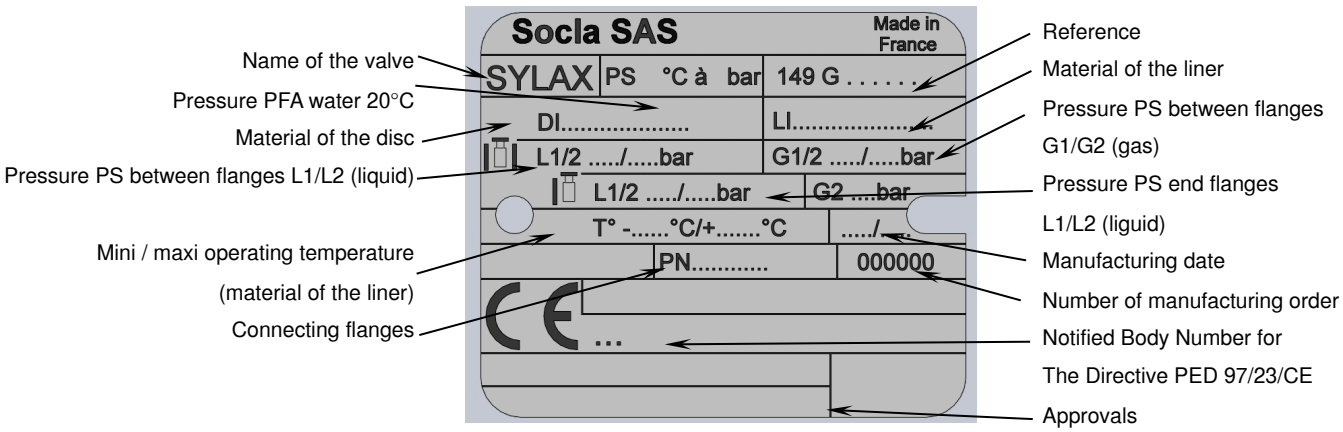
Approvals

- **NF ROB-GAZ brand NF 078 n° ROB 060-00 :** DN32 to DN300
- **DVGW n°DG-4313BS0449 : DN32 - 300**

These butterfly valves answer to the requirements of NF brand for gas installations.

Identification plate

An identification plate with information required by the Directives is clinched on the valve. This plate must not be removed and must be kept legible for the user.



Fluids Group 1: dangerous fluids (directive 67/548/CEE) /explosive / extremely inflammable /easily inflammable /inflammable / very toxic / toxic / combustive.
Fluids Group 2: all other fluids (except for water supply, distribution and evacuation networks).

Operating service temperature

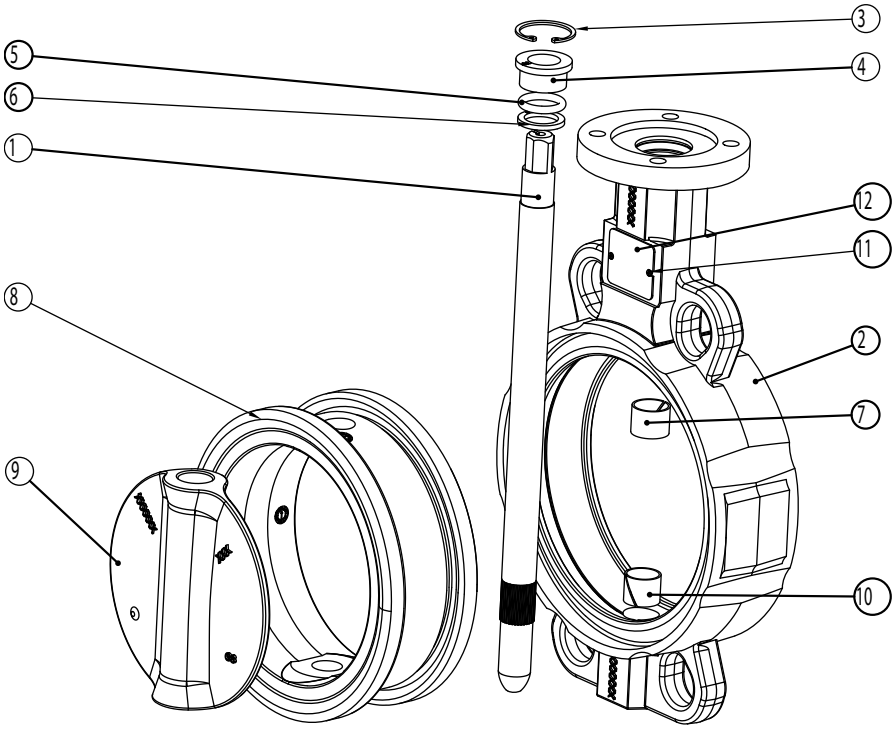
. From -20°C to +60°C: For gas networks subject to the French standard NF ROB-GAZ

It is recommended that the user check the compatibility of operations with regards to real working temperatures by contacting our technical service department.

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SYLAX GAS

Valve components



1. Shaft
2. Body
3. Circlip
4. Sealing washer
5. O' ring seal
6. Anti-extrusion bush
7. Upper guide bush
8. Liner
9. Disc
10. Rivet
11. Lower guide bush
12. Metal tag

Transport and storage

• **Before installation**

The valve must be held in a semi-closed position (as delivered). In the case of motorized valves with spring controls long storage is not advised.

The valve must not be removed from its original packaging.

The valve must be stored inside premises which are clean, dry and free from UV light.

On site, the valve must not be removed from its original packaging and must be protected from the surrounding elements (dust, sand, rain,….)

• **During handling and installation**

The valve must not be suspended by its handle.

The valve must be held using adequate straps. These must not be likely to damage the casing paint.

Any item having suffered a large impact must be returned to Socla for checking. A crack which is invisible to the naked eye may in time lead to a leak into the atmosphere.

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Installation

• **General remarks**

These butterfly valves are designed for gas installations. For safety reasons, the installation must take place under the supervision of authorised people taking account of local safety instructions and advice.

The handling of butterfly valves and their controls must be done by staff trained in all technical aspects of their operation.

Before installation the pipes must be depressurised and purged (empty of its gas) in order to avoid any danger to the operator.

The pipework must be correctly aligned so that no extra stress is exerted on the valve casing.

Check the compatibility of the connection flanges against the operating pressure : The PN number of the flanges must be greater or equal to the operating pressure.

The valve is a machined piece of equipment and must not be used to prise apart the flanges.

The use of compensation joints, as well as flanges elastomer coated, between flange and valve are strictly forbidden.

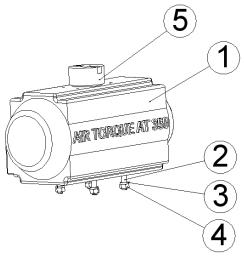
Fitting to the pipework

The butterfly valve Sylax gas is bi-directional.

The recommended installation position is with the shaft of the valve horizontal and the lower wing of the disc opening from upstream to downstream (gas direction). Particularly when dealing with slurries or products with a tendance to solidify.

Attention : The Sylax gas butterfly valve with pneumatic actuator or single acting electric actuator will always be supplied normally closed (NF). If you want to use it normally open (NO), please see the following procedure :

- Follow the general procedure by mounting the set valve/actuation in the position received (NF).
- Discouple the set valve/actuation by unscrewing the 4 nuts (4) and by removing the 4 washers (3).
- Pull the actuation (1) upwards.
- Turn the disc of 90° through an adjustable wrench thanks to the shaft in order to put the disc in open position (the saw line of the shaft must be parallel to the disc(and makes so the position of the shaft visible). Check that the saw line is perpendicular to the valve.
- Reassembl the actuator (1) onto the valve, it should be parallel to the pipe work.
- Screw the 4 nuts (4) **and** the washers (3).
- Turn the position indicator (5) of 90° after having before unscrewed the maintenance screw. (the yelow lines on the position indicator which indicate the position of the disc should be parallel to the pipe work).



Remarks :

- In this case, the valve closes anti-clock wise.
- Do not modify anything in the mounting of the solenoid valve.
- If using signalisations, modify the position indications on the switch boxes and positioners. In addition, verify and modify the wirings of the limit switches.

Installation on existing pipe work

1. Make sure that :
- the flange surfaces are clean and undamaged.
- the valve fits between the flanges without difficulty and without damaging the liner. Prise apart the flanges with a suitable tool without damaging the flanges if the gap is too narrow.
- the internal diameter of the flanges conforms to the dimensions in the « flange ratings » table.
- nothing interferes with the movement of the disc when the valve is operating.

2. Close the disc so that it is about 5 to 10mm inside the casing.
If the disc is open too far, it may be damaged by the flanges.

3. Slip the valve between the flanges. Centre the valve casing and fit all the screws.
Using extra seals or grease between the valve and the flanges is prohibited.

4. Open the valve completely.

5. Keep the valve aligned with the flanges while removing the flange retractors and tightening the nuts by hand.

6. Close the valve carefully making sure that the disc turns freely.

7. Open the disc again completely and tighten all the bolts (opposing bolts gradually and sequentially) until there is contact between the body of the valve and the flange (metal to metal).
If the nuts are tightened with the disc closed, the liner is then compressed unequally. This results in excessive torque and possible leaks.

8. Carry out a minimum of 5 complete operations of the valve.

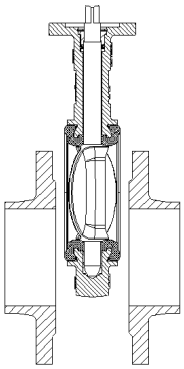
9. See “Commissioning” paragraph.

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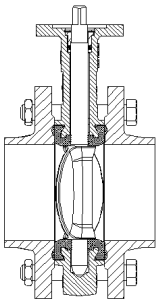
SYLAX GAS

Installation

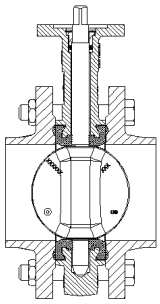
Prise apart the flanges as much as possible so that the valve collar slides in easily with the disc partly open.



With the disc still partly open attach the bolts without tightening the nuts.



Tighten opposing nuts sequentially. Check that the whole surface of the flange is in contact with the metallic part of the valve.



• **Installation on new pipe work**

1. Make sure that:

- The flange surfaces are clean and undamaged.
- The valve fits between the flanges without difficulty and without damaging the slèeve. Prise apart the flanges with suitable tools without damaging the flanges.
- The internal diameter of the flanges conforms to the dimensions in the « flange ratings » table.
- Nothing interferes with the movement of the shutter when the valve is operating.

2. Close the disc so that it is about 5 to 10mm inside the casing.

3. Fit the two flanges to the casing using some bolts, tighten the valve a little between the two flanges.

4. Fix this whole assembly to the pipe work.

5. Consolidate the flanges to the pipe work by welding at several points.

6. Unscrew the bolts and remove the valve from between the flanges.

Never weld the flanges with the valve in place : risk of burning the elastomer liner.

7. Finish welding the flanges and allow to cool completely.

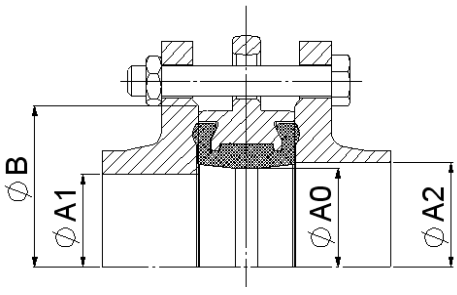
8. Return the valve to the pipe work using the procedure "installation on existing pipe work".(from point 3.).

• **Flange ratings**

The Sylax gas butterfly valve has been designed to be fitted between standard flanges. Only flanges type 11, 21 and 34 according to EN 1092-1 are completely suitable for this valve.

For other flange models, please check the figures in the table below. , we cannot guarantee these figures.

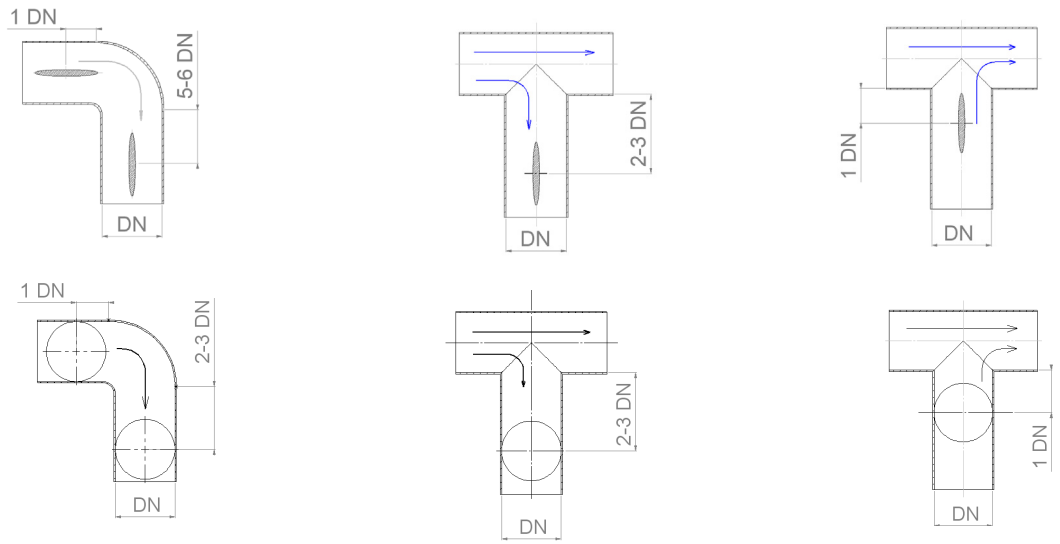
DN	Ø A0	Ø A1 mini	Ø A2 maxi	Ø B mini
32	43	33	51	80
32/40	43	33	51	80
40	43	33	51	80
50	50	36	59	90
65	65	54	74	110
80	80	73	88	128
100	100	93	116	148
125	125	119	143	178
150	150	146	166	202
200	200	196	224	258
250	250	246	280	312
300	300	296	329	365



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• **Installation conditions**

It is recommended that the distances indicated below be respected in order to prolong the life of the valve. Mounting the valve close to pipe work junctions places it in turbulent zones and increases wear.



Commission

Before putting valve into operation, check that:

- The working conditions are compatible with the details given on the identification plate , this instruction notice and the manufacturer's details (technical data sheet, price list catalogue, advisory service).
- The indicator on the control or the handle position (disc direction), properly indicates the position of the disc.
- All the connections have been properly made (pneumatic, electrical, hydraulic).
- The valve works effectively when tried (check several times). If necessary certain adjustments may be made to the end stops by qualified personnel.

On a new installation or after maintenance, the circuit must be rinsed with the valve completely open in order to remove solid matter which may damage the internal parts of the valve.

Use

In order to guarantee the good working of the valve, we advise to carry out 1 actuation minimum per month (full opening and closing).

The hot or cold parts of valve and actuation presenting a danger for the operator must be protected.

Do not insert fingers close to parts which are moving or between the lever and the handle during its operation.

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Maintenance

Maintenance and repair work must be carried out by qualified personnel.
During opening, closing and testing of the valve, take care not to put hands or any other object in the area of the disc.
Manipulate the liner and the disc with gloves in order to avoid damaging them by scratches.

• **Removing the valve from the installation**

The pipe must be depressurized and purged (emptied of its fluid) in order to avoid any danger to the operator. If the installation has carried fluids which are dangerous in themselves if in contact with the outside atmosphere (inflammable, corrosive, toxic, explosive..) it must be thoroughly cleaned to eliminate all risks.
All fluid remaining in the valve must be removed.
The temperature of the valve must be lower than 35°C to avoid all risk of burning.
If necessary, perform the operation using suitable protection (clothing, gloves, mask…).
Place the disc at 10° from opening before removing the valve.

Where a control uses an external energy source, it is essential to isolate this source before any operation.

• **Dismantling the control from the valve.**

Check the mounting position of the control before dismantling.
To reassemble, use all the original screws etc.

• **Maintenance of the valve**

All spare parts must be genuine Socla.
All spare parts must be used.
The using of grease is not allowed in a silicon free environment.
Greases and silicones used must be compatible with the fluid being carried and the installation constraints.

➢ **Sealing tightness**

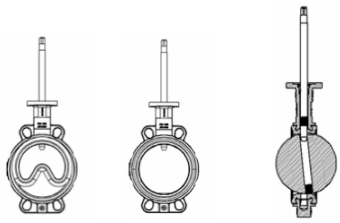
This maintenance must be done according to the working conditions.

. - Remove the valve from the installation (see specific procedure).
- Close the disc so that it is about 5 to 10mm inside the body.
- Remove, in order, the circlip(3), the sealing washer (4), the o' ring seal (5), the anti-extrusion bush (6). If need be, position the valve upside down to carry out this operation.
- Put the valve in open position.
- Pull the shaft (1) upwards and take it out completely.
- Remove the disc (9).
- Remove the liner (8).

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Valve re-assembly with replacement parts :

- Apply silicone inside and outside the liner (8) (not too much).
- Hold the body (2) of the valve in a vice.
- Put the liner (8) in place (date at the top and material at the bottom). Make sure it is properly in place in the neck of the valve (2).
- Grease the end of the shaft (1).
- Put the liner (8) in place by using a plastic-headed mallet to obtain the shape of an upside down heart.
- Check that the liner (8) fits properly into the body (2).
- Grease the liner (8) around the bottom of the shaft (1).
- Put the disc in place, the grooves at the bottom (DN32 up to DN150 : Use a plastic-headed mallet. DN200 up to DN300: position by hand).



- Make sure the liner (8) has not been deformed or damaged by the input of the disc (9).
- Position the shaft (1) indexing it to the saw cut on the upper part of the shaft and the mark in relief on the side of the disc (9).
- Reassemble the secondary sealing tightness in order, the anti-extrusion bush (6), the o'ring seal (5), the sealing washer (4) (large interior diameter at the bottom) and the circlip (3).
- Make one complete manœuvre by turning the disc 360°.
- It is advised that the valve be re-tested by a test under pressure at 1.5 PMA (trial P11 following the standard EN12266-1).
- Fit the valve to the pipe work : see ''installation'' paragraph).

➢ **Guide bushes**

It is recommended that this maintenance be carried out every ten years or every 1,000,000 actuations (in normal conditions of use).

Follow the ''Tightness'' procedure. Remove the guide bushes (7,11) use a mallet and a screw driver.

For the valve re-assembly, put the guide bushes (7,11) in with a mallet. The smallest guide bush in the lower half-body and the biggest one in the upper half-body. Follow the ''Tightness'' procedure.

Safety

As well as the indications given in the preceding paragraphs of this notice, it is imperative that the following instructions be followed:

- This notice must be available on site where Sylax gas valves are installed.
- Personnel carrying out any intervention on the valve (installation, setting, repair, maintenance) must be qualified for the task.
- Any modification of the valve and/or its control (as delivered by Socla) means cancellation of the NF ROB GAZ approval.
- the user must check the tightness of the installation after assembling, further to a faulty operation or on a periodic basis under normal conditions..
- It is the responsibility of the user to check after the installation of the valve that there is no leakage. Especially in case of deliberate internal explosive atmospheres.
- Internal rules and legislation current in the country concerned with respect to health and safety at work must be applied and respected.
- The valve and its control must not undergo any modification without prior approval from our advisory service. Socla is not responsible for any damage which may be caused by the use of parts, accessories or controls which are not genuine Socla.
- Hot or cold parts of the valve which present a danger to the operator must be protected.
- Do not insert fingers close to parts which are moving or between the lever and the handle during its operation.

Socla Sas
365, rue du Lieutenant Putier – 71530 VIREY-LE-GRAND
Postal address : CS10273 – 71100 CHALON/SAONE cedex - France

Tel : 33 +3 85 97 42 42
Fax : 33 +3 85 97 97 42
E-mail : commerfr@socla.com
www.socla.com