

## DECLARATION OF CONFORMITY

ATEX – Directive 94/9/CE/23 EC

For units and safety systems in use of areas with a potential risk of explosion

Manufacturer and authorized to compile the technical file:

Name Dansk Ventil Center A/S  
Address Ferrarivej 14  
Post code and city 7100 Vejle Denmark

### Scope:

DVC butterfly valves Type 223X (wafer) and Type 224X (lug)  
Dimension: DN 40 to DN 600

The valves are supposed to be, installed in earthed and antistatic or metal piping systems.

For the above, mentioned valves we have done a risk analysis according to EN13463-1:2009, supported by:  
**DANISH TECHNOLOGICAL INSTITUTE**  
Accident Investigation and Safety Center

The result show, that the valves do not have an own potential ignition-source, if they are used as per definition. Therefore, the valves do not fall into the range of applications of ATEX 94/9/CE and they are not, allowed to be marked accordingly. (EU guide for 94/9/EU)

### Following standards are, used for risk analysis:

EN 1127-1:2011 Explosive atmospheres. Explosion prevention and protection  
EN 13463-1:2009 Non-Electrical Equipment for Potentially Explosive Atmospheres- Part 1: Basic Method and Requirements  
DS/CLC/TR 50404 Electrostatics – Code of practice for the avoidance of hazards due to static electricity

The valves can be, installed in possible explosive atmospheres as follows:  
Group II, Zone 1, 2, 21, 22 gas-group IIC

If the valves will be maintained, it is due to the potential-equalising-process only allowed to use original spare parts.

All the information for correct use has to be, taken from the installation and maintenance instructions.

Authorized person

*Paul Sieber*  
Signature Title Place Date  
25-11-2013

Technical Manager Denmark, Vejle

## DECLARATION OF CONFORMITY

The pressure Equipment Directive 97/23 EC

Manufacturer and authorized to compile the technical file:

Name Dansk Ventil Center A/S  
Address Ferrarivej 14  
Post code and city 7100 Vejle Denmark

### Description of the pressure equipment

Butterfly Valve Type 223X (wafer) and 224X (lug)

Dimension/pressure:

DN 40 to DN 150 = PN 16  
DN 200 to DN 600 = PN 10

### Conformity Assessment Procedure Followed:

Module B + C1 (category III)

### Name and address of the notified body

TÜV Nord Systems GmbH & Co. KG  
Große Bahnstrasse 31  
D-22525 Hamburg  
Germany

### EC Type Examination Certificate (Module B)

07 202 3637 Z 00417/H-0001

### Conformity of Type (Module C1)

07 202 3637 Z 00427/H-0001

Authorized person

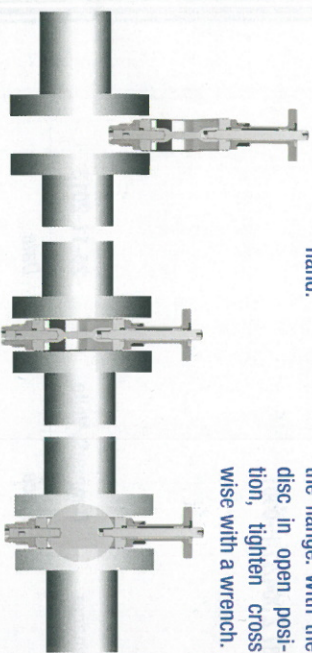
*Paul Sieber*  
Signature Title Place Date  
25-11-2013

Technical Manager Denmark, Vejle



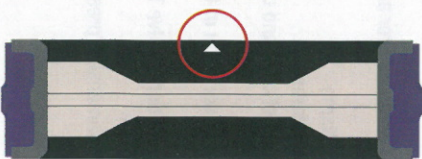
## Butterfly Valve Type 2232 and 2242

- Check that the specifications on the identification plate, meets the requirements regarding pressure, temperature and media.
- The piping must have a straight line and the flanges has to be parallel. Furthermore there must be a distance between the flanges, corresponding to the face-to-face dimensions of the butterfly valve.
- The butterfly valve can be mounted in any direction. However if there is a lot of dirt particles on the bottom of the pipe, it will be suitable to mount the stem of the butterfly valve horizontally. This will protect the pivot point of the disc.
- Before commissioning, the installation has to be rinsed for dirt and remnants of welding material, to avoid damage on the liner. During the rinsing procedure, the butterfly valve has to be positioned as open and may not be operated, before the rinsing has been completed.
- Welding operation may not be performed near by the butterfly valve, as welding drops can damage the liner.
- Do not use flanged packings or other packing materials. The liner works as sealing to the atmosphere.
- Where vacuum, high flow rate or water hammering can occur, flanges with-out a loose collar should be used, to obtain the best conditions.
- Carefully place the butterfly valve between the flanges, with the disc in closed position.
- Check that the flange covers the area of the liner. Afterwards tighten the bolt on the flange by hand.
- Carefully open and close the valve to check that the disc centralizes and the disc does not touch the flange. With the disc in open position, tighten cross wise with a wrench.

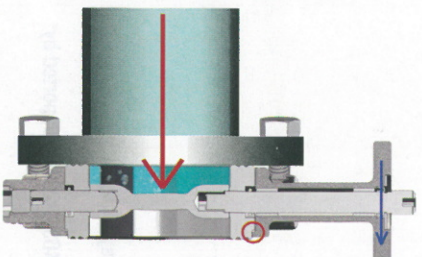


# Operation

As the butterfly valves from DN40 to DN300 are equipped with the unique wave shaped liner, the operation of the valves, either free stem, handle or gear operated, has to follow the guide lines as shown below.

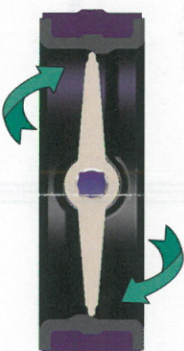


Turn towards the arrow to close the disc.



TYPE 2242 LUG valve can be used only in one direction when used as a "end of line" valve. Flow-arrow on valve top flange. Mounted between flanges the valve is "bi-directional".

A small triangular shaped figure is placed on the liner - this triangle indicates which way the disc has to enter the liner. Generally spoken the disc has to rotate clockwise "CW" - in order to have the lowest possible torque - and thus the longest possible lifetime.



Turn clockwise "CW" - 90° to close.

Though the valves are constructed to work as shown above, counter clock wise rotation "CCW" - can be applied without problems. If you take in to consideration that the torque in this case will increase.

The best angle for a closed valve is 90° because of the special design of the liner - above 90° the torque will increase considerably.

# Maintenance

- No particular maintenance or greasing is required.
- It is recommended to manoeuvre the valves at least once every month.
- Valves should be checked on regular basis when in service.
- When stored before installation the valves have to be kept in a clean, dry place away from the light.

## Rubber liners (NBR, EPDM-HT and FPM):

Rubber will over time loose flexibility and compression set. The higher the temperature rubber is installed in, the shorter the expected lifespan is. Our values for temperature is given to the best of our knowledge, and we advice that valves are tested for lifespan if installation is running near the given temperature limit. If in doubt, please consult us.

## Certificates for butterfly valve Type 2232 and 2242



- CE according to PED 97/23/EC
- ATEX according to ATEX 94/9/EC

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