INSTALLATION AND OPERATING MANUAL FOR BUTTERFLY VALVES

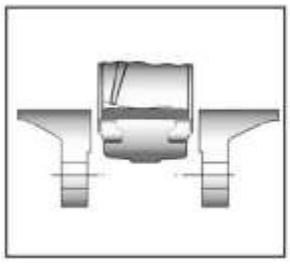
INSTALLATION INSTRUCTIONS

GENERAL GUIDELINES :

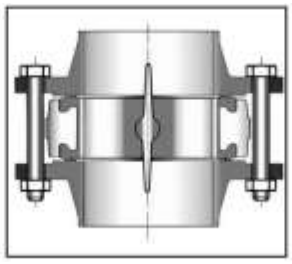
- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid,pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves to be installed are of correct strenght to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

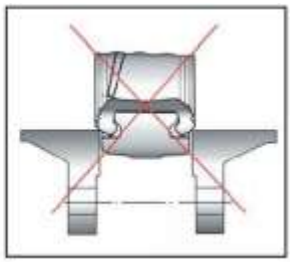
INSTALLATION INSTRUCTIONS :

- **Before installing the valves,clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned (if they're not,the valves may not work correctly).**
- **Make sure that the two sections of the pipe (upstream and downstream) match,the valve unit will not absorb any gaps.Any distortions in the pipes may affect the thightness of the connection,the working of the valve and can even cause a rupture.**To be sure,place the kit in position to ensure the assembling will work.
- **If sections of piping do not have their final support in place,they should be temporarily fixed.This is to avoid unnecessary strain on the valve.**
- The valve must be inserted between flanges with disc half opened but the disc must not overpass the valve thickness. Position the bolts to keep centered the valve. Then open fully the valve and tighten the bolts. **See graph under**.



Half open valve introduction





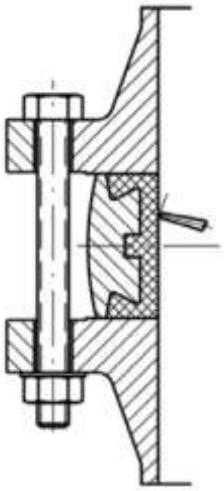
Complete opened disc valves when screw tightening

- Tighten the bolts in cross.
- The disc must move easily inside the pipe.
- Valves must be opened during cleaning operation.
- Tests must be done with a cleaned pipe.
- Tests must be done with opened valve. Test pressure must not be higher than the valve specification according to ISO 5208 or EN 12266-1.
- Then open slowly the valve.
- **Do not mount butterfly valves with stainless steel pressed collars and turning flanges without strias.**
- **And not on flat face flanges without strias (example : painted cast iron fittings)**

Information provided as an indication and subject to possible modification

INSTALLATION AND OPERATING MANUAL FOR BUTTERFLY VALVES

ADVISABLE TIGHTENING TORQUES FOR BOLTING FLANGES :



DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Couple de serrage (Nm)	34	46	28	35	48	83	84	129	172	96	129	155	160	218

These theorical values are indicative and need to be adapted to the service conditions, the bolts used and the type of flanges used.

For information, below are the maximum torques allowed by the bolt according to its material.

		Maximum torques (Nm)			
	Bolting types	5,6 / A307 Gr.B	8,8 / A193 B7	10,9	12,9
Bolting DN	M12 (1/2'')	41,16	84,28	117,6	142,1
	M14 (9/16'')	66,64	132,3	186,2	225,4
	M16 (5/8'')	102,9	205,8	289,1	347,9
	M18 (3/4'')	142,1	284,2	396,9	475,3
	M20 (3/4'')	196	401,8	568,4	676,2
	M22 (7/8'')	259,7	539	764,4	911,4
	M24 (1'')	338,1	695,8	980	1176
	M27 (1''1/8)	499,8	1029	1470	1764
	M30 (1''1/4)	666,4	1421	1960	2352

Information provided as an indication and subject to possible modification

INSTALLATION AND OPERATING MANUAL FOR BUTTERFLY VALVES

BEST POSITION INSTALLATION :

For wastewater, fluids with solid particles or cold network (air conditioning for example), the best position is the horizontal one :



- **For an installation in ATEX area, check the conductivity between the valve, the upstream pipe and the downstream pipe and make sure the pipe is connected to the earth.**

MAINTENANCE :

- We recommend to operate fully the valve 1 to 2 times per year.
- During maintenance operation, ensure that the pipe isn't under pressure, that there's no fluid in the pipe and that the valve is isolated. If there's a fluid in the pipe, evacuate it. Ensure that there are no risks due to the temperature or the fluid (like acids). If the fluid is corrosive, inert the installation before maintenance operation.

Information provided as an indication and subject to possible modification

TUBOTEK | Article references

BV | Article mapping

Appendix 1

Tubotek SKU	Sferaco / Sectoriel	Grouping ID	DN / PN
VWGEH-040	1170040	VWGEH-XXX	DN32-40 PN10/16
VWGEH-050	1170050	VWGEH-XXX	DN50 PN10/16
VWGEH-065	1170065	VWGEH-XXX	DN65 PN10/16
VWGEH-080	1170080	VWGEH-XXX	DN80 PN10/16
VWGEH-100	1170100	VWGEH-XXX	DN100 PN10/16
VWGEH-125	1170125	VWGEH-XXX	DN125 PN10/16
VWGEH-150	1170150	VWGEH-XXX	DN150 PN10/16
VWGEH-200	1170200	VWGEH-XXX	DN200 PN10/16
VWGEH-250	1170250	VWGEH-XXX	DN250 PN10/16
VWGEH-300	1170300	VWGEH-XXX	DN300 PN10/16
VWGEH-350	1170350	VWGEH-XXX	DN350 PN10/16
VWGEH-400	1170400	VWGEH-XXX	DN400 PN10/16
VWGEH-450	1170450	VWGEH-XXX	DN450 PN10/16
VWGEH-500	1170500	VWGEH-XXX	DN500 PN10/16
VLGEH-200+10	1175200	VLGEH-XXX	DN200 PN10
VLGEH-250+10	1175250	VLGEH-XXX	DN250 PN10
VLGEH-300+10	1175300	VLGEH-XXX	DN300 PN10
VLGEH-350+10	1175350	VLGEH-XXX	DN350 PN10
VLGEH-400+10	1175400	VLGEH-XXX	DN400 PN10
VLGEH-040	1175040	VLGEH-XXX	DN40 PN10/16
VLGEH-050	1175050	VLGEH-XXX	DN50 PN10/16
VLGEH-065	1175065	VLGEH-XXX	DN65 PN10/16
VLGEH-080	1175080	VLGEH-XXX	DN80 PN10/16
VLGEH-100	1175100	VLGEH-XXX	DN100 PN10/16
VLGEH-125	1175125	VLGEH-XXX	DN125 PN10/16
VLGEH-150	1175150	VLGEH-XXX	DN150 PN10/16
VLGEH-200+16	1175201	VLGEH-XXX	DN200 PN16
VLGEH-250+16	1175251	VLGEH-XXX	DN250 PN16
VLGEH-300+16	1175301	VLGEH-XXX	DN300 PN16
VLGEH-350+16	1175351	VLGEH-XXX	DN350 PN16
VWIHE-040	1173040	VWIHE-XXX	DN32-40 PN10/16
VWIHE-050	1173050	VWIHE-XXX	DN50 PN10/16
VWIHE-065	1173065	VWIHE-XXX	DN65 PN10/16
VWIHE-080	1173080	VWIHE-XXX	DN80 PN10/16
VWIHE-100	1173100	VWIHE-XXX	DN100 PN10/16
VWIHE-125	1173125	VWIHE-XXX	DN125 PN10/16

Source: Tubotek import - test kopie syveco - C / D / H.

Technical data and certifications: original manufacturer documentation.

SKU and grouping identifiers reproduced from the import file.

TUBOTEK | Article references

BV | Article mapping

Appendix 2

Tubotek SKU	Sferaco / Sectoriel	Grouping ID	DN / PN
VWIHE-150	1173150	VWIHE-XXX	DN150 PN10/16
VWIHE-200	1173200	VWIHE-XXX	DN200 PN10/16
VWIHE-250	1173250	VWIHE-XXX	DN250 PN10/16
VWIHE-300	1173300	VWIHE-XXX	DN300 PN10/16
VWIHE-350	1173350	VWIHE-XXX	DN350 PN10/16
VWIHE-400	1173400	VWIHE-XXX	DN400 PN10/16
VWIHE-450	1173450	VWIHE-XXX	DN450 PN10/16
VWIHE-500	1173500	VWIHE-XXX	DN500 PN10/16
VWIHE-600	1173600	VWIHE-XXX	DN600 PN10/16
VLIHE-200+10	1176200	VLIHE-XXX	DN200 PN10
VLIHE-250+10	1176250	VLIHE-XXX	DN250 PN10
VLIHE-300+10	1176300	VLIHE-XXX	DN300 PN10
VLIHE-350+10	1176350	VLIHE-XXX	DN350 PN10
VLIHE-040	1176040	VLIHE-XXX	DN40 PN10/16
VLIHE-050	1176050	VLIHE-XXX	DN50 PN10/16
VLIHE-065	1176065	VLIHE-XXX	DN65 PN10/16
VLIHE-080	1176080	VLIHE-XXX	DN80 PN10/16
VLIHE-100	1176100	VLIHE-XXX	DN100 PN10/16
VLIHE-125	1176125	VLIHE-XXX	DN125 PN10/16
VLIHE-150	1176150	VLIHE-XXX	DN150 PN10/16
VLIHE-200+16	1176201	VLIHE-XXX	DN200 PN16
VLIHE-250+16	1176251	VLIHE-XXX	DN250 PN16
VLIHE-300+16	1176301	VLIHE-XXX	DN300 PN16
VLIHE-350+16	1176351	VLIHE-XXX	DN350 PN16
VWIHN-040	1177040	VWIHN-XXX	DN40 PN10/16
VWIHN-050	1177050	VWIHN-XXX	DN50 PN10/16
VWIHN-065	1177065	VWIHN-XXX	DN65 PN10/16
VWIHN-080	1177080	VWIHN-XXX	DN80 PN10/16
VWIHN-100	1177100	VWIHN-XXX	DN100 PN10/16
VWIHN-125	1177125	VWIHN-XXX	DN125 PN10/16
VWIHN-150	1177150	VWIHN-XXX	DN150 PN10/16
VWIHN-200	1177200	VWIHN-XXX	DN200 PN10/16
VLIHN-040	1178040	VLIHN-XXX	DN40 PN10/16
VLIHN-050	1178050	VLIHN-XXX	DN50 PN10/16
VLIHN-065	1178065	VLIHN-XXX	DN65 PN10/16
VLIHN-080	1178080	VLIHN-XXX	DN80 PN10/16

Source: Tubotek import - test kopie syveco - C / D / H.

Technical data and certifications: original manufacturer documentation.

SKU and grouping identifiers reproduced from the import file.

TUBOTEK | Article references

BV | Article mapping

Appendix 3

Tubotek SKU	Sferaco / Sectoriel	Grouping ID	DN / PN
VLIHN-100	1178100	VLIHN-XXX	DN100 PN10/16
VLIHN-125	1178125	VLIHN-XXX	DN125 PN10/16
VLIHN-150	1178150	VLIHN-XXX	DN150 PN10/16
VLIHN-200+10	1178200	VLIHN-XXX	DN200 PN10
VLIHN-200+16	1178201	VLIHN-XXX	DN200 PN16

Source: Tubotek import - test kopie syveco - C / D / H.

Technical data and certifications: original manufacturer documentation.

SKU and grouping identifiers reproduced from the import file.