

# Butterfly valves



Sanitary  
flow  
equipment

# Butterfly Valve VF ...

The Aerre Inox stainless steel butterfly valve VF are on/off routing valves, available with manually and pneumatically operated system.

Due to their large opening areas, minimize turbulence, offer low pressure drop and provide gentle treatment of low and medium viscosity product. The handle mechanically locks the valve in its open or closed position.

A disc closes against a silicone seal when the handle is at right angle to the pipeline; when the handle is turned 90° the disc is parallel to the product flow and the valve is fully open.

The valve consists of two valve body halves, valve shutter/stem, and seal gasket, assembled and secured by means of screws and nuts.

## TYPICAL APPLICATION

Butterfly valve is suitable in every process for food industry: mineral water, milk, wine, beer, juice.

Ideal also for pharmaceutical, biotechnological and chemical plants.

## SIZE RANGE

Interchangeable body heads are available for different applications, completely machined from bar, no welded tube extension

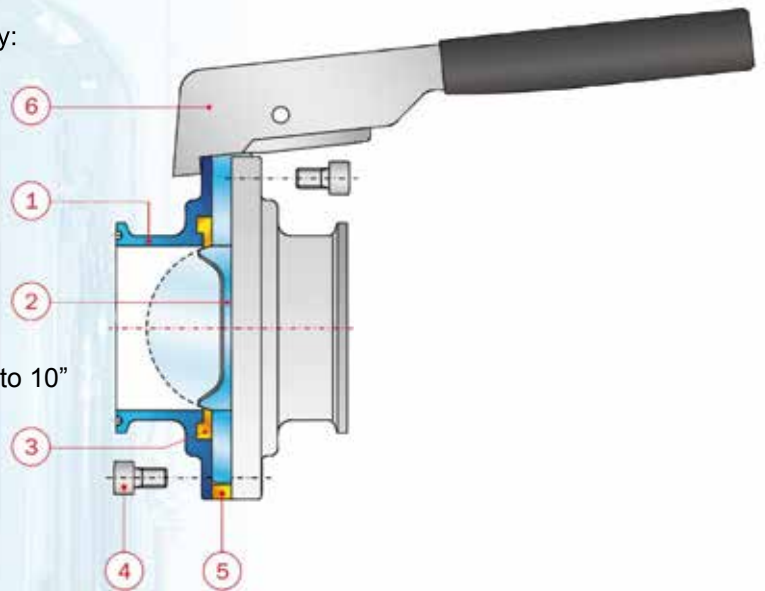
Model VFS-TC – clamp BS4825/ASME-BPE from 3/4" up to 10"

Model VFS-SS – butt weld from 3/4" up to 10" - Tube OD

Model VFS-DIN – DIN 11851 from DN20 up to DN100

Model VFC – quick dismantling from 3/4" up to 2"

Model VFF-TB – tank bottom flush weld from 3/4" up to 4"  
extended tube for orbital welding or other on request



## SURFACE FINISH

Internal body surfaces Ra <0,5 micron or better

External mirror polished

Electro-polished also available on request

## SEAT MATERIALS

Complying with FDA guidelines

For more information on seat characteristics please contact us

The valve can be fitted with manual handle or with ISO 5211

## OPERATOR

The valves can be fitted with manual handle or with ISO 5211 mounting pad for pneumatic actuators

- Stainless steel manual handle (quarter-turn for open/close)
- Thermoplastic lockable griper handle 12 positions
- Stainless steel pull and turn handle
- Pneumatic actuator (DA double acting – SR spring return)

## PED PRESSURE DIRECTIVE

In compliance with the European Directive 2014/68/EU

The valves are designed according to directive 2014/68/EU, certified by notified body and meets the basic requirements indicated in Directive 2014/68/EU

## PRESSURE/TEMPERATURE RATING

Min / Max working pressure -1 / +10 bar (g)

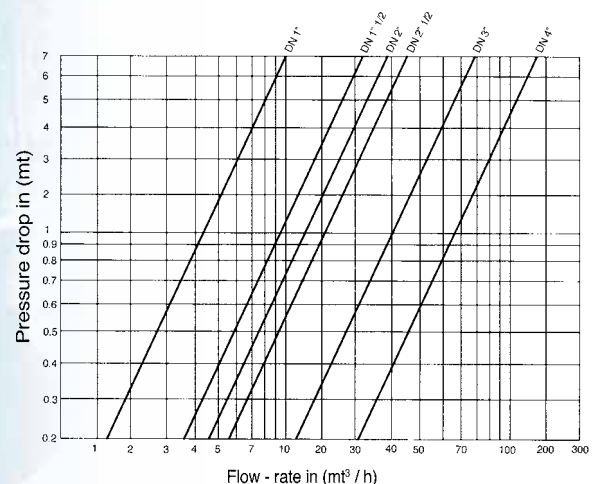
Min / Max working temperature 0°C / 150°C

Ranges change based on size

## MATERIAL

1	Body valve	Forged AISI 316L-1.4404 ss
2	Disc/stem	Forged AISI 316L-1.4404 ss
3	Gasket	Silicone, EPDM, FKM
4	Screw	AISI 304 stainless steel
5	Cap	Silicone
6	handle	AISI 304 stainless steel

## Pressure drop/capacity diagram for INCH tube



disc fully opened 90°

medium: water at ambient temperature 20°C



For equipment in compliance with the **European Directive ATEX 2016/34/EU** 



### **ANTISTATIC DEVICE** (optional on request)

To eliminate possibility of static electrical charges within the valve, a grounding connection (anti-static device) is mounted on the side of the forged disc/stem as shown to ensure electrical continuity for the entire butterfly valve.

Specific and supplementary mark according to Directive 2016/34/EU ATEX indicating in order the specific symbol for the explosive. The unit number and the category to which it belong, the type of atmosphere in which the product can be used and temp. class.

Declaration CE of conformity according to evaluation form "A" (ENCLOSURE X European Directive 2016/34/EU ATEX )

# VFF-BW Tank bottom Butterfly valve

## APPLICATION

The **VFF-BW** tank bottom butterfly valve are on/off routing tank bottom valves, incorporates all the advantages of standard VF

Available in manual/pneumatically operated.

Due to their large opening areas, minimize turbulence, offer low pressure drop and provide gentle treatment of low and medium viscosity products. The handle mechanically locks the valve in its open or closed position.

For special applications on existing reactors, we also manufactures special adaptor plates in order to accommodate customer request.

The valve consists of one standard valve body half, welding plate, valve shutter/stem, and seal gasket, assembled by means of bolts. Thanks to its special design, the welding plate is an integral welded part of the tank surface, preventing the stagnation of the media.

## BENEFITS OVER CONVENTIONAL TOV

Valves mounts flush with the inside vessel wall, minimizing dead leg

Higher CV with practically a full bore

No pressure drop

Simple quarter-turn opening

## STANDARDS

The **VFF-BW** tank bottom butterfly valve is a process accessory to be used for clear or viscous media from group 2 in accordance with

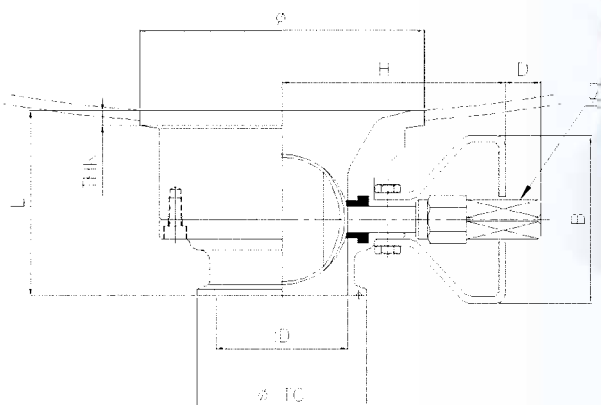
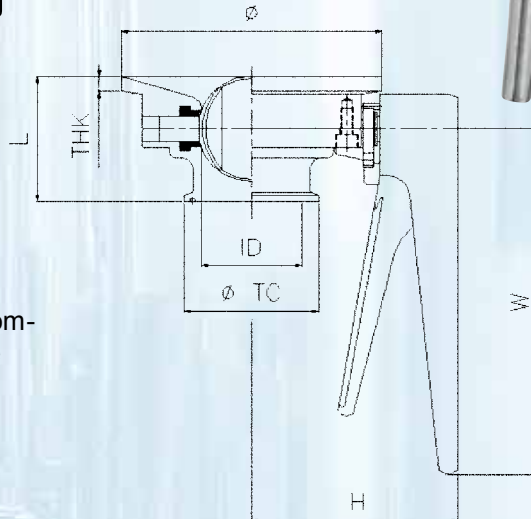
Pressure Equipment Directive PED 2014/68/EU are CE compliant under the SEP "Sound Engineering Practice" Article 4 - Paragraph 3

## PRESSURE / TEMPERATURE RATING

Min / Max working pressure      -1 / 10 bar (g)

Min / Max working temperature    0°C / 150°

Special executions available on request : Welding plate with radius or bigger different diameter / thickness, extended tube for orbital welding or with bend. For special applications, we manufactures special adaptor plates, when replacing a conventional flush tank valve, with a flush tank butterfly valve and also to ship the plate independently from the valve, in order to accommodate customer requests.



# Butterfly Valve VFC

The butterfly valve **VFC** are on/off routing valves, available for manually operated system.

The valve consists of two valve body halves, valve shutter/stem, and seal gasket, assembled by means of clamp and can be easily and quickly dismantled and reassembled without tools in less than half the time required for butterfly valves secured with screws and nuts.

The handle is welded onto the clamp body.

## PRESSURE / TEMPERATURE RATING

Min / Max working pressure -1/+10 bar (g)

Min / Max working temperature 0°C / 150°C

## SEAT MATERIAL

White silicone complying with FDA guidelines

## OPERATOR

Pull and turn manual handle available only (quarter-turn for open/close)

## SURFACE FINISH

Internal body surfaces 0,5 micron Ra or better

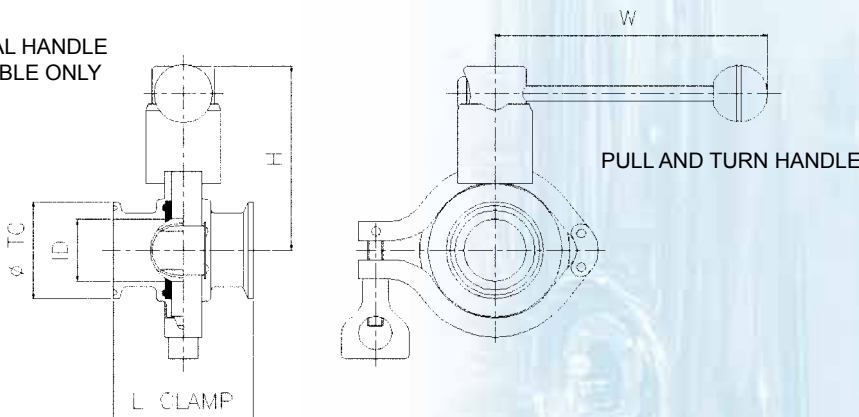
External mirror polished

## CONNECTIONS

Interchangeable body heads are available clamped ASME-BPE, butt weld OD



MANUAL HANDLE  
AVAILABLE ONLY



## Ordering information

To specify the part completely, start with the product description and select the additional options as shown below:

Valve	Option	Size Valve	Inlet Connection	Size Connection	Outlet Connection	Size Connection	Seals	Actuator	Box Sensor	Finish	Material
VFS	-	150	A	M	A	M	-X	SAA	11	-11	A

Butterfly Valve	Size Valve	Size Connection	In/Out Connection	Seals	Actuator	Box Sensor	Surface Finish	Materials
VFS standard valve	075 100 150 200 250 300 400 600 800 A10	3/4" 1" 1 1/2" 2" 2 1/2" 3" 4" 6" 8" 10"	ASME / BS A B DIN (*) C F ISO (*) H I SMS (*) J K DIN 11851 female O DIN 11851 male/in N	X Silicone E Epdm (up to 2"only) V Fkm (up to 4"only)	M2P Manual 2 position on/off MMP Manual 12 position MEI Manual 2 position on/off SAA pneumatic simple effect DAA pneumatic double effect RCE pneumatic simple effect inox vertical W for actuator (flange ISO 5211) bare shaft other on request	11 Box with n.2 mechanical sensors 12 Box with n.2 inductive sensors 13 Box with n.2 inductive ATEX on request	11 ≤ 0,5 µm 81 ≤ 0,2 µm 51 ≤ 0,5 µm + Electropolish on request	A AISI 316L-1.4404 B 1.4435 C C22 Hastelloy D C276 Hastelloy on request
VFC fast disassembly		AVAILABLE SIZE VFC 1" - 1 1/2" - 2" // VFF 1" - 1 1/2" - 2" - 2 1/2" - 3" - 4"						
VFF tank bottom on request								

Option	In/Out Connection	Seals	Actuator
- Standard Safe Supply	Clamp Buttweld	X Silicone	M2P Manual 2 position on/off
A ATEX execution	A B C F H I J K O N	E Epdm (up to 2"only) V Fkm (up to 4"only)	MMP Manual 12 position MEI Manual 2 position on/off SAA pneumatic simple effect DAA pneumatic double effect RCE pneumatic simple effect inox vertical W for actuator (flange ISO 5211) bare shaft other on request

(\*) and other on request



ASEPTIC SAMPLING VALVES



SANITARY SAMPLING VALVES



SANITARY SAMPLING BOTTLE



TANK BOTTOM ASEPTIC VALVE



SPRING CHECK VALVES



HIGH PURITY BALL VALVES



BUTTERFLY VALVES



DTS HEAT EXCHANGERS



SIGHT GLASS-FLOW INDICATOR



CLAMP FITTINGS



TANK CONNECTIONS



SILICONE HOSE & FITTINGS



MAGNETIC MIXER



ITT DIAPHRAGM VALVES



WASHING DEVICES



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