



Installation, Operating and Maintenance Instructions:

ETG-HBV-CE/PE/RJT

Hygienic Butterfly Valve with BS4825

Clamp Ends/Plain Weld Ends/RJT Male End

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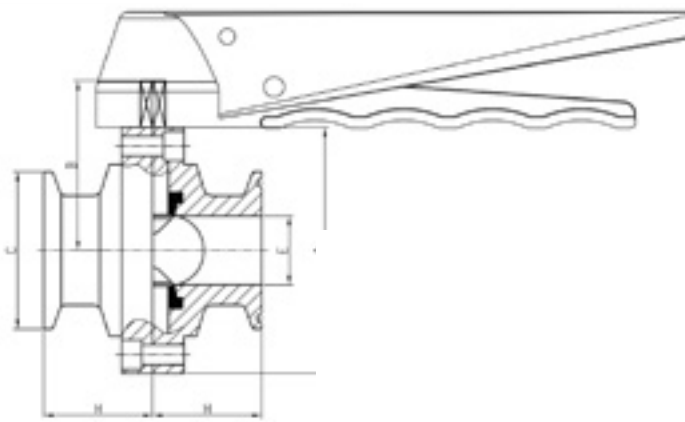
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Hygiene and Safety

Valve Information

ETG-HBV-CE

Hygienic Butterfly Valve
with BS4825 Clamp Ends



- F316L Stainless Steel body construction, F316L Stainless Steel Disc and Stem. FDA Food Grade EPDM Seal fitted as standard (FKM available).

- Stainless Steel Multi Position Lever (12 positions) with Locking facility.

- 145 psi (10 bar/g) pressure rated.

- -10 to +120 deg C max Temp.

- Clamp Ferrule Ends to BS4825.

- CE marked in accordance with 2014/68/EU

A good all round, robust general purpose Hygienic Butterfly Valve. Compact and robust design. Can be fitted with our Stainless Steel Hygienic Cylinder style Actuators or our Electric or Pneumatic Rack and Pinion style Actuators, Positioners, Switch Boxes and Solenoids by using the custom "TSM" style Actuator Mounting Kit.

EPDM Valve Seat conforms to FDA 177.2600 standards.
0.8 Ra Polish on valve Disc and internal.

Available size range: 1/2" - 4"

3.1 Material Certificates available upon request

Item	Part	Material	Qty.
1	Body	F316L	1
2	Disc	F316L	1
3	Seat	EPDM	1
4	Lever	304SS	1
5	Body Bolt	304SS	4

SIZE	A	B	C	E	H
1/2"	75	55	25.4	9.5	33
3/4"	75	55	25.4	15.85	33
1"	79	61	50.5	22.1	44.5
1-1/2"	85	64.3	50.5	34.8	44.5
2"	105	74.3	64	47.5	47.6
2-1/2"	112	77.6	77.5	60.2	48.4
3"	125	84.7	91	73	51.5
4"	157	101.6	119	97.6	51.5

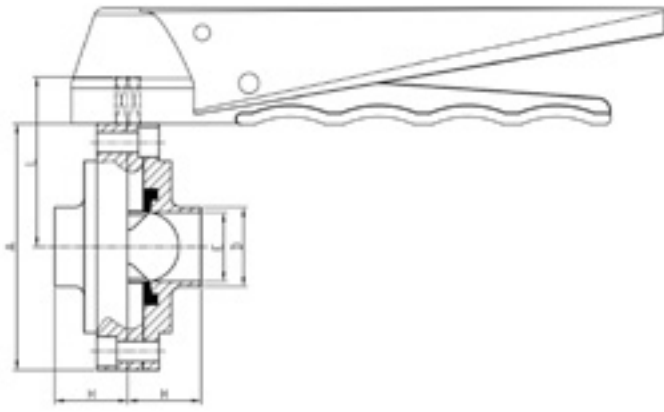
SIZE	Torque*	ISO 5211	Stem Sq	Weight
1/2"	4Nm	N/A	N/A	0.6Kg
3/4"	4Nm	N/A	N/A	0.7Kg
1"	5.0 Nm	F04/F05	11mm	0.9Kg
1-1/2"	6.1 Nm	F04/F05	11mm	1.1Kg
2"	7.2 Nm	F04/F05	11mm	1.4Kg
2-1/2"	9.2 Nm	F04/F05	11mm	1.8Kg
3"	16 Nm	F04/F05	11mm	2.1Kg
4"	31 Nm	N/A	N/A	3.1Kg

*Torques based on Clean Water Duty
@ 5 bar/g without safety.

Valve Information

ETG-HBV-PE

Hygienic Butterfly Valve
with BS4825 Plain Weld Ends



- F316L Stainless Steel body construction, F316L Stainless Steel Disc and Stem. FDA Food Grade EPDM Seal fitted as standard (FKM available).

- Stainless Steel Multi Position Lever (12 positions) with Locking facility.

- 145 psi (10 bar/g) pressure rated.

- -10 to +120 deg C max Temp.

- Plain Weld Ends to suit Imperial O/D BS4825 Tubing.

- CE marked in accordance with 2014/68/EU.

A good all round, robust general purpose Hygienic Butterfly Valve. Compact and robust design. Can be fitted with our Stainless Steel Hygienic Cylinder style Actuators or our Electric or Pneumatic Rack and Pinion style Actuators, Positioners, Switch Boxes and Solenoids by using the custom "TSM" style Actuator Mounting Kit.

EPDM Valve Seat conforms to FDA 177.2600 standards.
0.8 Ra Polish on valve Disc and internal.

Can be fitted with IDF, SMS and DIN end connections.

Available size range: 1" - 4"

3.1 Material Certificates available upon request

Item	Part	Material	Qty.
1	Body	F316L	1
2	Disc	F316L	1
3	Seat	EPDM	1
4	Lever	304SS	1
5	Body Bolt	304SS	4

SIZE	A	D	E	L	H
1"	79	25.4	22.1	61	34
1-1/2"	85	38.1	34.8	64.3	38
2"	105	50.8	47.5	74.3	40
2-1/2"	112	63.5	60.2	77.6	40
3"	125	76.2	72.2	84.7	41
4"	157	101.6	97.6	101.6	44

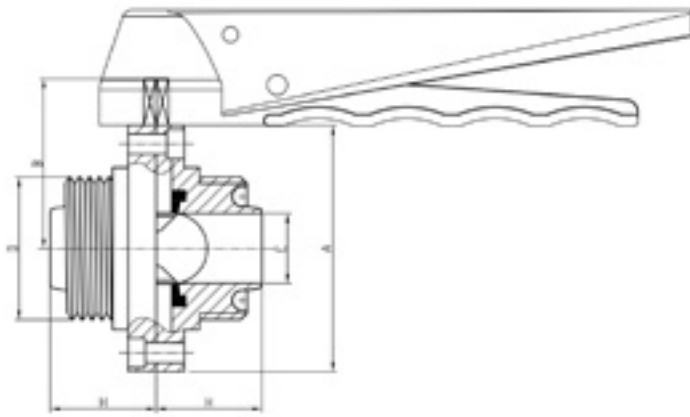
SIZE	Torque*	ISO 5211	Stem Sq	Weight
1"	5.0 Nm	F04/F05	11mm	0.9Kg
1-1/2"	6.1 Nm	F04/F05	11mm	1.1Kg
2"	7.2 Nm	F04/F05	11mm	1.4Kg
2-1/2"	9.2 Nm	F04/F05	11mm	1.8Kg
3"	16 Nm	F04/F05	11mm	2.1Kg
4"	31 Nm	N/A	N/A	3.1Kg

***Torques based on Clean Water Duty**
@ 5 bar/g without safety.

Valve Information

ETG-HBV-RJT

Hygienic Butterfly Valve
with BS4825 RJT Male Ends



Item	Part	Material	Qty.
1	Body	F316L	1
2	Disc	F316L	1
3	Seat	EPDM	1
4	Lever	304SS	1
5	Body Bolt	304SS	4

SIZE	A	B	D	E	H
1"	79	61	45.720x8TPI WHIT	22.1	34
1-1/2"	85	64.3	58.420x8TPI WHIT	34.8	38
2"	105	74.3	72.720x6TPI WHIT	47.5	40
2-1/2"	112	77.6	85.420x6TPI WHIT	60.2	40
3"	125	84.7	98.120x6TPI WHIT	73	41
4"	157	101.6	123.520x6TPI WHIT	97.6	50

- F316L Stainless Steel body construction, F316L Stainless Steel Disc and Stem. FDA Food Grade EPDM Seal fitted as standard (FKM available).
- Stainless Steel Multi Position Lever (12 positions) with Locking facility.
- 145 psi (10 bar/g) pressure rated.
- -10 to +120 deg C max Temp.
- RJT Male x Male Ends to BS4825 (Male x Female available to order).
- CE marked in accordance with 2014/68/EU

A good all round, robust general purpose Hygienic Butterfly Valve. Compact and robust design. Can be fitted with our Stainless Steel Hygienic Cylinder style Actuators or our Electric or Pneumatic Rack and Pinion style Actuators, Positioners, Switch Boxes and Solenoids by using the custom "TSM" style Actuator Mounting Kit.

EPDM Valve Seat conforms to FDA 177.2600 standards.
0.8 Ra Polish on valve Disc and internal.

Available size range: 1" - 4"

3.1 Material Certificates available upon request

SIZE	Torque*	ISO 5211	Stem Sq	Weight
1"	5.0 Nm	F04/F05	11mm	0.9Kg
1-1/2"	6.1 Nm	F04/F05	11mm	1.1Kg
2"	7.2 Nm	F04/F05	11mm	1.4Kg
2-1/2"	9.2 Nm	F04/F05	11mm	1.8Kg
3"	16 Nm	F04/F05	11mm	2.1Kg
4"	31 Nm	N/A	N/A	3.1Kg

***Torques based on Clean Water Duty**
@ 5 bar/g without safety.

Valve Information

ETG-HBV-(CE/PE/RJT)



Mounting Kit

We offer this valve with a "TSM style Actuator Mounting Kit".



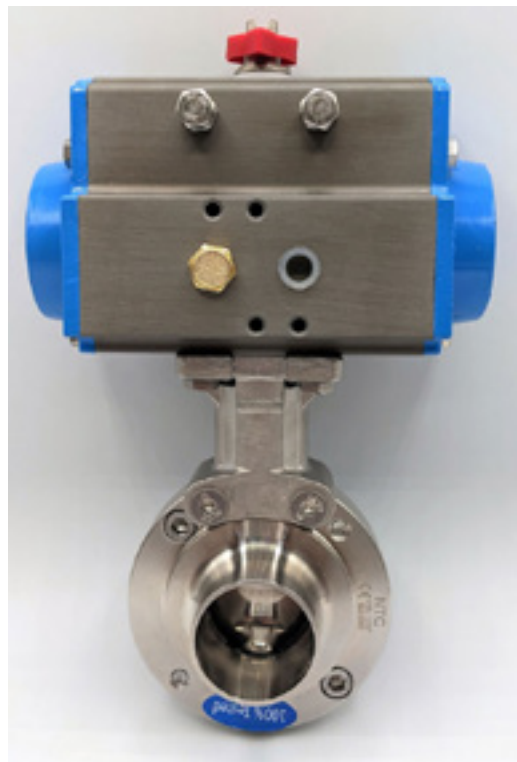
Seals

We offer "spare seals" in EPDM and FKM (Viton ®).



(Air/Spring) Actuator

The valve can be supplied with a "Hygienic Style" Stainless Steel Single Acting (Air/Spring) Actuator.



"TSM" Style Actuator Mounting Kit

The "TSM" Mounting Kit allows virtually any type or make of Electric or Pneumatic Actuator to be mounted to our valve.

Introduction

G.C. Supplies offers a wide range of valves, designed and assembled to handle and drive fluids in industrial procedures.

The compatibility of materials used to build the valves (see technical specifications) and the application of valves to the different industrial processes is at the user's risk. Valves will have an optimal behaviour when working conditions do not exceed the recommended pressure and temperature limits for which they have been designed.

Transport and Storage Conditions

Visual Inspection	It is important to conduct a visual inspection to check for any damage on the product that could have occurred during transport, unloading or placement. If you notice any kind of anomaly upon receiving the goods, please contact GC Supplies in order to resolve the issue.
Storage	During storage it is recommended to keep valves in a dry and clean environment within the included protective wrapping to avoid damage or dirt accumulation. The protective wrap should not be removed until the valve is ready to be installed.
Before installing and/or manipulating these elements, read these instructions carefully. If you fail to understand any of their content, please contact G.C. Supplies.	

Installation Instructions

Preparation	Firstly, remove any remains of packaging from the actuator. Serious problems may arise with the installation of a valve into an unclean pipe, make sure the pipe is not dirty before installing it. Ensure the
Assembling	<p>RJT Male End Valve Do not disassemble this valve in order to install it. Make sure the valve's pipe and threaded ends are clean and are compatible with one another. Do not use the valve's handle as a lever to screw the valve into the pipe.</p> <p>Clamp Ends Valve It is not necessary to disassemble the valve in order to install it. Make sure the pipe's Ferrules and Clamps are clean. Place the joints between the Clamp Ferrules to keep them tight and join them together with a clamp. There is a different joint for each valve size.</p> <p>Plain Ends Valve Before welding, disassemble the valve as instructed in the 'Reparation Instructions' chapter below. Weld the connections to the connecting pipes. When cold, clean the weld surfaces and then assembly the valve as indicated in the 'Assembly' section in the 'Reparation Instructions' chapter below.</p>

Design of this type of valves allows us to install them in any position as they are bidirectional, so the direction of fluid flow does not matter. If possible, it is recommended to install the valve in horizontal position and the stem (handle) upwards.

When installing the valve it is advisable to ensure a good alignment and parallelism of with pipes. Once installed, it is recommended to open and close the valve a couple of times to check its performance and to check if there is any obstruction in the disc that prevents it from closing.

Operating Instructions

Usage

Before starting the equipment you have to read the Valve Information and never exceed the recommended values. Never touch the valve and/or pipes in contact with surrounding fluid when the process is started; you can suffer from injuries such as burns. The butterfly valves provide a leak proof lock when used adjusted to the pressure and temperature values for which they have been designed.

Operation

The actuator and valve are composed of many parts, either rotary or sliding; mind your fingers around these areas as there is a risk to get seriously injured. When operating the valve you must avoid excessive lateral efforts with the handle. To close it, you must turn the handle 90 degrees clockwise. When the handle is inline with the pipe, valve is open.

- Operation in extreme temperature conditions which exceed the recommended temperature limits may damage internal and external parts, and it could potentially become hazardous for the operating or maintenance personnel.

- The operation in extreme pressure conditions exceeding the recommended limits may cause a malfunction and spontaneous breakage of parts and, therefore, becoming hazardous for the operating or maintenance personnel.

Maintenance Instructions

Frequency, place and process of maintenance should be determined by taking into account by usage of the product. However, periodical checks explained below will be useful to extend the service life of the valve and reduce installation problems.

Valves must not remain in an open or closed position for a long period of time. It is recommended, if the process allows for it, to conduct an operational task for the valve every six months.

Reparation Instructions

Disassembly

Before removing the valve from the pipe for cleaning or substitution, make sure the line has been closed and depressurised, since the wrong handling might cause a serious accident as well as serious damage to the equipment. Make sure the working area is clean.

- Remove the plastic plugs.
- Loosen the screw and remove the entire handle and multi-position mechanism.
- Loosen and remove the body screws.
- Separate the two body parts.
- Remove the disc and seat.
- Remove the seat from the disc.

Assembly

Before proceeding to reassemble the valve, make sure that the repair kit and/or pieces to be used are appropriate for this valve. When it is assembled again, cleaning is essential for a long lifecycle of the valve.

- a) Put the disc into the seat, lubricate the seat and disc with soapy water to make installation process easier.
- b) Put the seat in open position to facilitate the assembly of the valve.
- c) Put the disc and seat assembly between the two body parts.
- d) Assemble the body screws adjusting slowly and alternating diagonal, check that the seat is positioned correctly (see the recommended tightening torque below).
- e) Put the entire handle in open position and put in the screw.
- f) Attach the plastic plugs.

Once installed, it is recommended to open and close the valve a couple of times to check its performance and to see if there is any obstruction in the disc that could prevent it from closing.

Tightening Torque

Bolt	Torque de (N.m)
M6	8 - 11
M8	13.5 - 16
M10	22 - 25

Hygiene and Safety

The fluids that go through the valve can be corrosive, toxic, flammable or pollutant. When operating valves, you must follow the operation instructions.

It is recommended that you:

- Protect your eyes.
- Wear gloves and appropriate working clothes.
- Wear safety footwear.
- Wear a helmet.
- Have running water to hand.
- Have an extinguisher to hand when work with flammable fluids.

Before removing a valve from a pipe, check always if the line is completely cold, drained and depressurised.

Operate the valve in open position to make sure there is no pressure in the internal cavity.