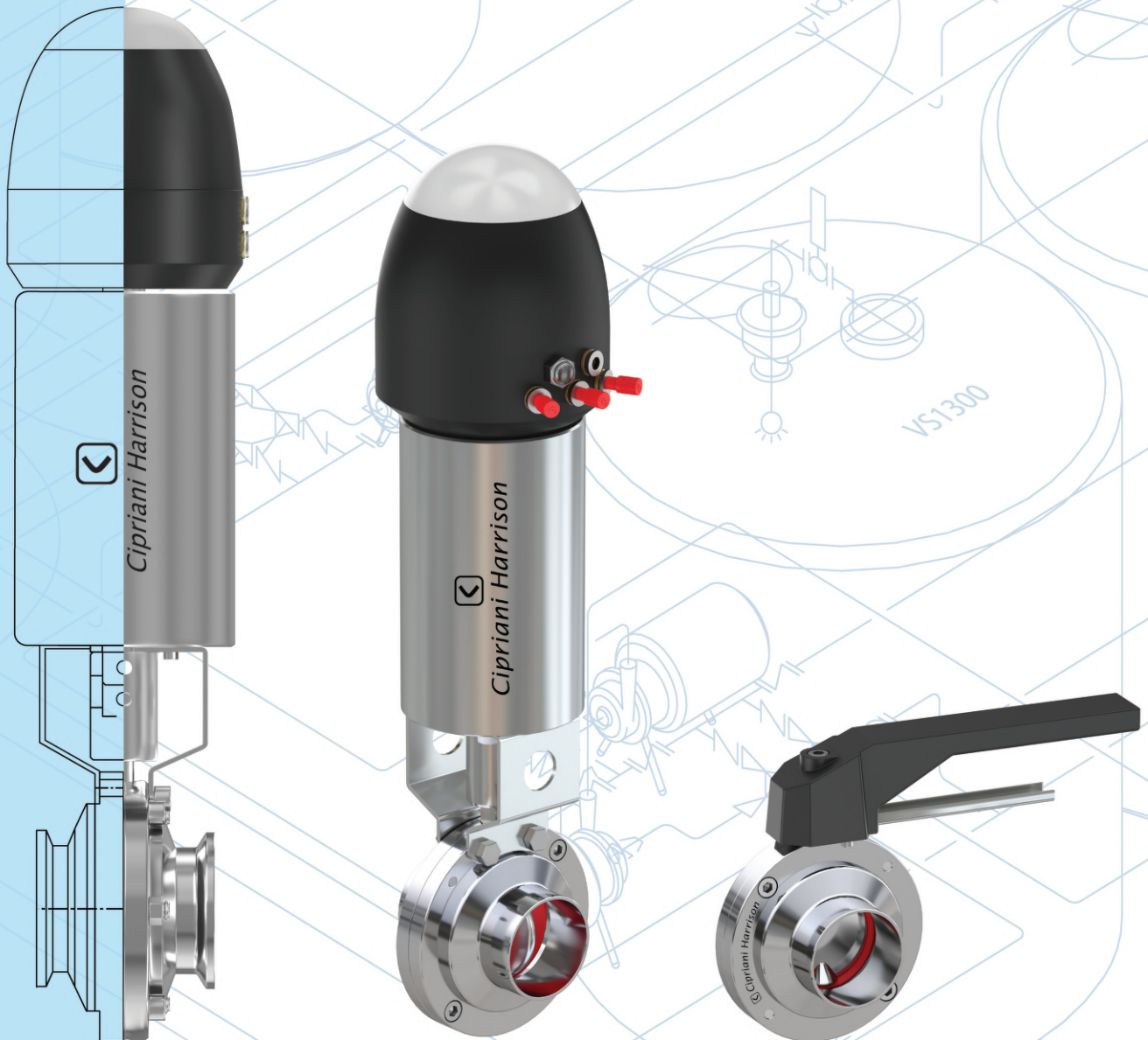




Cipriani Harrison Valves
Hygienic Stainless Steel Valves

Butterfly Valve

An Array Of Hygienic Stainless Steel
Valves & Flow Components.



BUTTERFLY VALVE

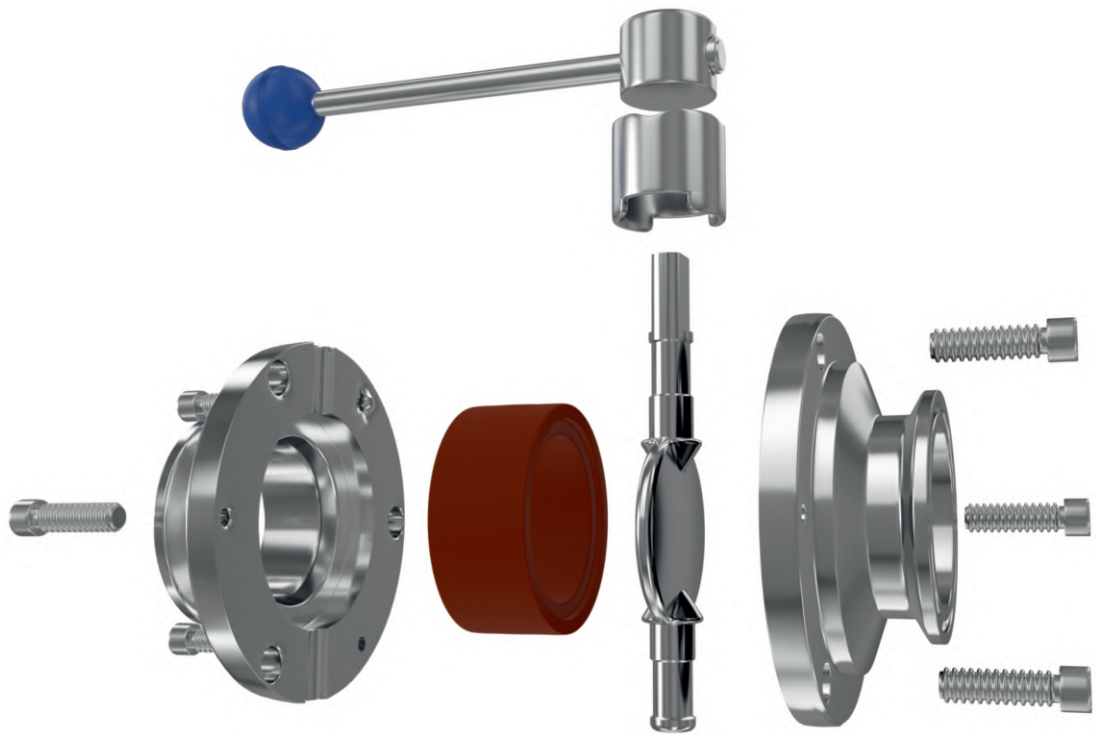
Butterfly valves have been a vital system component in the hygiene industry for decades. They are relatively straightforward components developed, designed and manufactured for installation in pipelines for shutting off a flow of liquid.

Butterfly Valve is the most versatile valve solution which can be used in modern process technology with substantial opening & can ideally handle low & medium viscous products. It is widely accepted in the different process application for Water, Steam, Food & Beverage, Cosmetic, Bio-Pharma & pharmaceutical industry.



DESIGN

Cipriani Harrison Butterfly valve are manufactured from forging process. The flange & disc of our valves are manufactured by a forging route, giving it a superior grain structure. The valves are machines and polished to achieve $Ra < 0.8\mu m$. This complements to the robust and more reliable design.



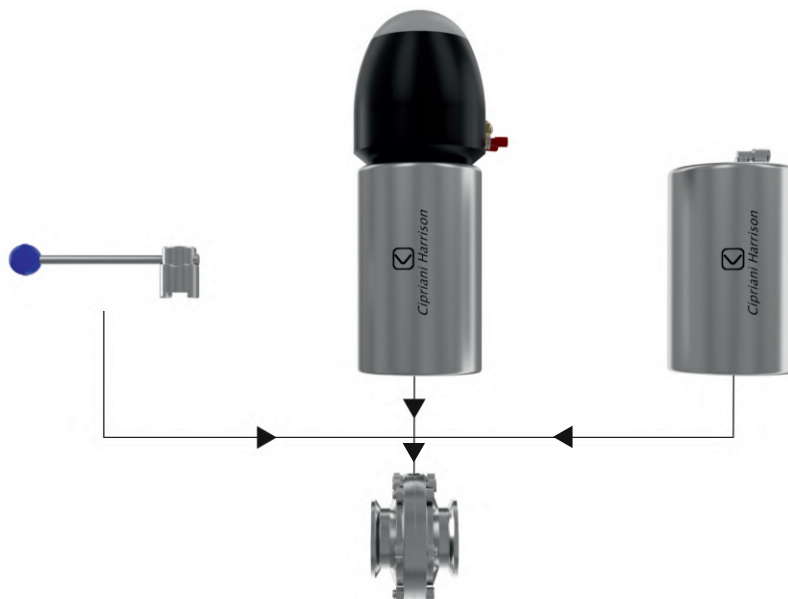
SEAL

Cipriani Harrison's Butterfly Valve are available with comprehensive range of seal option, to fit in the required environment. Different options of seals are available to suite different thermal environment and chemical resistance, intern increasing the seal life. Cipriani Harrison has a special designed PTFE seal, to suite more aggressive media.



ACTUATION & OPERATION

Cipriani Harrison Butterfly Valve are available with wide range of manual handle & pneumatic actuators. Suitable handle can be selected based on the end application, for just opening & closing or multi position or precession manual control. Different type of Pneumatic actuators are available for different media and pressure.



SIZE

Cipriani Harrison manufactures Butterfly Valve to meet a wide size spectrum. For smaller needs the size ranges from fractional size of $\frac{1}{2}$ " to larger size up to 8". All options available for all sizes.



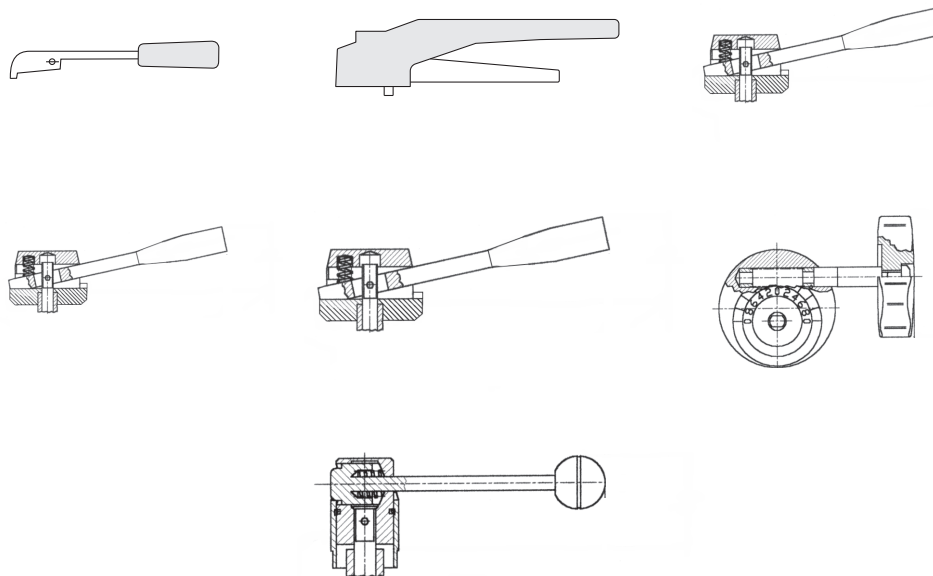
STANDARD BUTTERFLY VALVE

Cipriani Harrison's Butterfly Valve is available with a manual pull type stainless steel handle in weld end connection and Silicone Seal as standard configuration.



DIFFERENT HANDLES FOR DIFFERENT NEEDS

Cipriani Harrison Butterfly valve are available with quite elaborative options of handle depending on operators ease and need of the application.



ACTUATED BUTTERFLY VALVE

Cipriani Harrison Butterfly valve are available a maintenance free pneumatic actuator. A wide selection of actuators are available featuring horizontal or vertical actuator installation, fail safe spring return actuator or double acting pneumatic actuator.



END CONNECTIONS & STANDARDS

Cipriani Harrison Butterfly valves are available with a wide array of end connection like Weld End, Sanitary Clamp End, Union or Threaded End, I-Line or Flanged end connection. The valves are available in different international standards like ISO, DIN, RJT, IDF, etc to meet different regional needs.



DIFFERENT CONFIGURATION FOR DIFFERENT NEED

WELD END

This valve can be directly welded to the Pipeline. Available in different sizes and Different standards.



CLAMP END

This valve has a sanitary ferrule connection to clamp it with counter sanitary ferrule using a clamp with a compatible sanitary gasket. Available in different sizes in DIN or ISO standards.



UNION END

This valve has a Union connection i.e. Either a male threaded connection or a female liner to adopt the counter Connection. Available in different sizes to suite different standards.



FLANGED END

This valve has two auxiliary flanges which holds the parent butterfly valve with help of studs. The auxiliary flanges have O-ring which butts & seals to the parent butterfly valve flange face flushing the surface for no dead pockets. This design is ideally suited for a insulation needing a full proof and hassle free easy to maintain valve.



TANK BOTTOM

This valve is ideally suited for tank bottom or tank outlet application. This valve has a tank bottom flange with a self-draining radius ensuring no product hold-up in the flange. Available in different sizes, standards and mode of actuation.



BLOCK AND BLEED BUTTERFLY VALVE

(Also known as Leakage Butterfly or Mix-Proof Butterfly Valve)

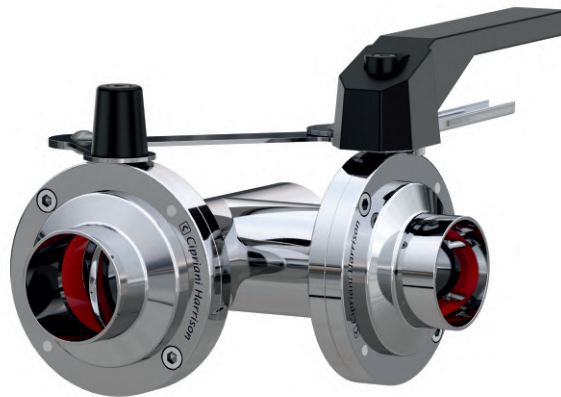
This valve is used to securely separate two non-compatible media. This valve comes with two disc separating the two non-compatible media, with help of two individual seals. It has a separate leakage chamber with a spring loaded valve arrangement. When the valve is closed i.e. two media are separated at that time the leakage.

valve is kept in open condition with help of a link. So, if there is any leakage, the media would come out from the leakage chamber. When the valve is opened and the two media are allowed to intermix or flow to the opposite port at that time the leakage chamber valve is in closed condition. This valve is available in various end connection, standards and can either be manual or pneumatically actuated.



TEE BUTTERFLY VALVE WITH LINK CONFIGURATION

This valve is ideal for flow diversion purpose. The butterfly valves are mounted in a Tee pattern for the allocated purpose of diversion. One can either individually & independently operate the valves or it can be operated through a Mechanical Link arrangement. In a mechanical link arrangement, two valves or all the three valves can be operated together by just a single lever or an pneumatic actuator.



FEEDBACK OPTION

Cipriani Harrison Butterfly Valve are available with different feedback option. From a simple open & close sensor feedback or 24V DC Direct I/O to more sophisticated AS-i protocol, as few options.



Application

Stainless steel hygienic butterfly valves are used in process piping systems for isolation and control. Butterfly valves operate either manually or automatically.

Working Principle

Quarter turn (90° rotation) operation closes or opens the valve. A wide variety of handles allow the valve disc to be set at various positions so that the flow rate can be regulated.

Standard Design

The valve consists of two valve bodies and a disc made from forged stainless steel which ensures a non porous, smooth surface and dimensionally stable construction. The valve disc has a dense and polished surface which combined with a slim design allows for a high CV. The PTFE stem bushing ensures an extra smooth disc rotation. All Seats and Seals are made from FDA approved materials. The valves are assembled by means of allen head cap screws.

Available Sizes

1", 1½", 2", 2½", 3", 4"

DN25, DN40, DN50, DN65, DN80, DN100

Options

Variety of multiple position handles for manual operation
(Please see page No. 21 - 22)

Manual or Automatic Block & Bleed Valve for double safety
(Please see page No.8 or 15)

Automatic operation by vertical/horizontal pneumatic actuators
(Please see page No. 16, 17 and 18)

Electrical control unit with micro switches or proximity switches and solenoid valve for remote operation.

End connections: Sanitary Clamp, Butt-Weld, I-Line, or others on request.

Material: AISI 316L or AISI 304L



Technical Specification :
Material :

Product wetted steel parts.....AISI 316L or AISI 304L

Other steel parts.....AISI 304

FDA Seals :

Standard.....SILICONE

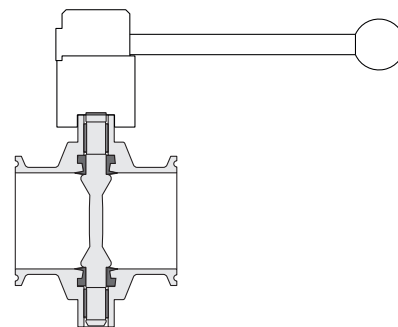
Optional.....VITON

EPDM

BUNA

PTFE

* USP Class VI material available upon request


Nominal Pressure :

Maximum product pressure

Size	Elastomer		PTFE	
	Max. Product Pressure(PSI)	Torque (ft.lb)	Max. Product Pressure(PSI)	Torque (ft.lb)
1"/ DN25	147	6	60	6.6
1.5"/ DN40	147	7.2	60	8.0
2"/ DN50	147	11	60	12
2.5"/ DN65	147	14.4	60	16
3"/ DN80	147	18.5	60	20.3
4"/ DN100	147	22	60	24.2

(Leakage test according to BS EN 12266-1)

Supply Pressure for
Air Actuator (Min.- Max. Range). 70 - 115 PSI (Dry & Filtered Compressed Air)

Temperature & Chemical Compatibility:

Please refer to the temperature and chemical compatibility charts located in the General Information section of the catalog. Temperature & Chemical Compatibility are limited by the seal material.

Surface Finish :

 Surface in contact with product.....Ra $\leq$ 25 μ in (Grit 220g)

 Optional.....Ra $\leq$ 15 μ in (Grit 320g)

*Electropolishing available upon request.

ConnectionsSanitary Clamp (ISO 2852 / BS 4825)

Optional.....Butt Weld (ISO 2037 / BS 4825)

I-Line, Threaded Union End

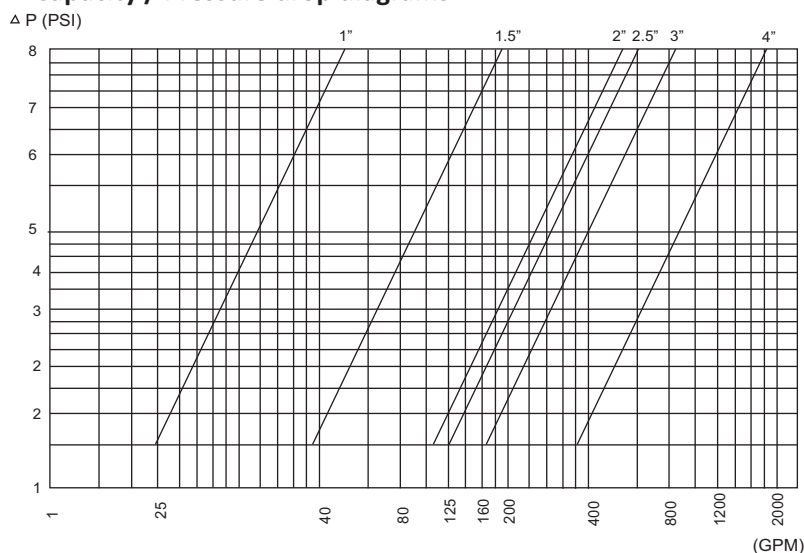
Intermediate Flange

Other Connections on request

Compressed air quality

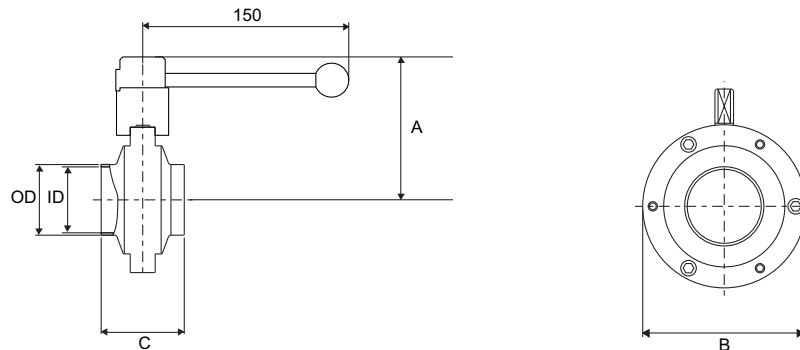
Compressed air quality :	quality class according to ISO 8573-1
Content of solid particles :	quality class 3, max. number of particles per m ³ 10000 of 0,5 µm < d ≤ 1,0 µm 500 of 1,0 µm < d ≤ 5,0 µm
Content of water :	quality class 3, max. dew point temperature -20° C For installations at lower temperatures or at higher altitudes, additional measures must be considered to reduce the pressure dew point accordingly.
Content of oil :	quality class 1, max. 0,01 mg/m ³

The oil applied must be compatible with Polyurethane elastomer materials.

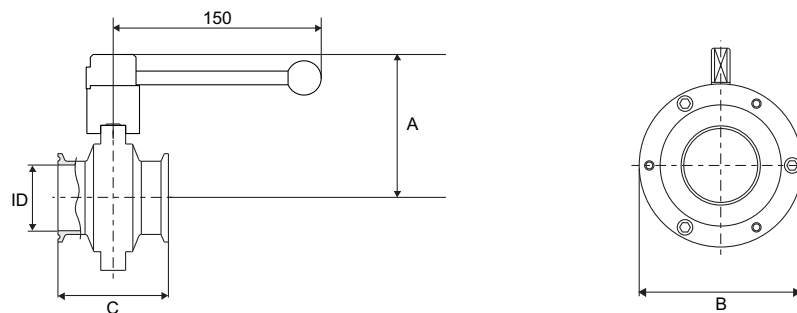
Technical Specifications :
Capacity / Pressure drop diagrams

Cv values

Note : For the Cv values the following applies
Medium : Water (20° C) / (68° F)
Measurement : In accordance with VDI 2173

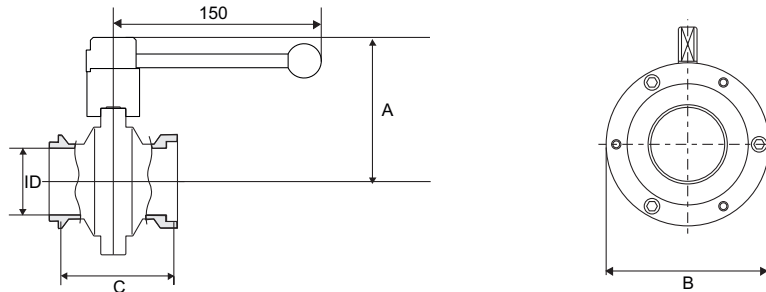
Size	Cv GPM	Kv m ³ /hr
1"	27	23
1.5"	92	79
2"	248	212
2.5"	287	245
3"	411	351
4"	880	752

Dimensions ISO (mm)

Butt-Weld

Dimensions	1"	1 ½"	2"	2 ½"	3"	4"
A	85	84	98	102	108	125
B	79	85	105	112	125	157
C	68	76	80	80	80	89
OD	25.4	38.1	50.8	63.5	76.2	101.6
ID	22.2	34.9	47.6	60.3	72.6	97.4

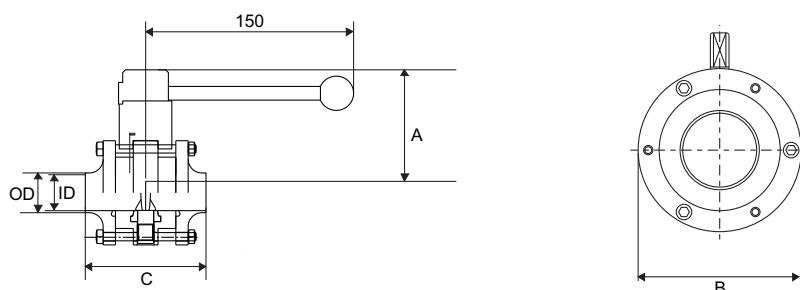

Sanitary Clamp

Dimensions	1"	1 ½"	2"	2 ½"	3"	4"
A	85	84	98	102	108	125
B	79	85	105	112	125	157
C	68	76	80	80	82	89
ID	22.2	34.9	47.6	60.3	72.6	97.4

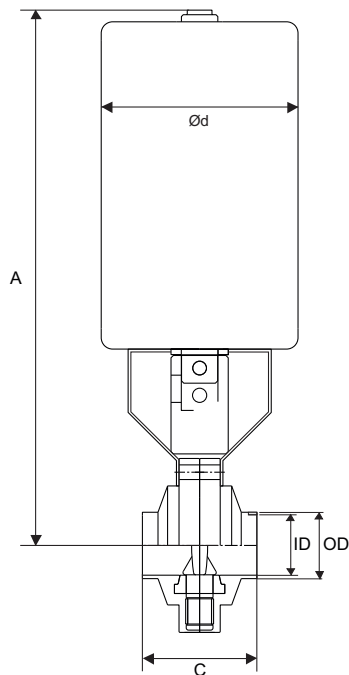
Dimensions ISO (mm)

I-Line

Dimensions	1"	1 ½"	2"	2 ½"	3"	4"
A	85	89	98	102	108	125
B	79	85	105	112	125	157
C	75	75	86	84	92	110
ID	22.2	34.9	47.6	60.3	72.6	94.7

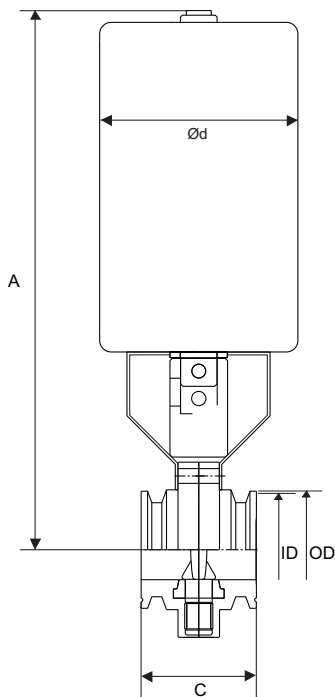
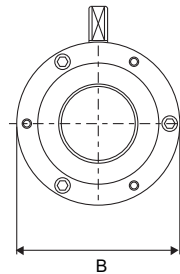
* Consult the factory for I-line Male x Male
or I-line Female x Female "C" Dimensions.


Intermediate Flange

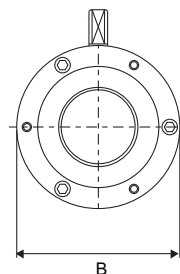
Dimensions	1"	1 ½"	2"	2 ½"	3"	4"
A	85	89	98	102	108	125
B	79	85	105	112	125	157
C	88	88	88	88	94	94
OD	25.4	38.1	50.8	63.5	76.2	101.6
ID	22.2	34.9	47.6	60.3	72.6	94.7

Dimensions ISO (mm)

Butt-Weld

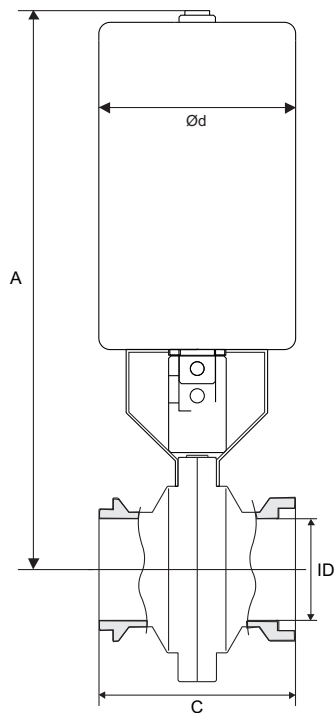
Dimensions	1"	1½"	2"	2½"	3"	4"
A	275	281	301	308	321	353
B	79	85	105	112	125	157
C	68	76	80	80	80	89
OD	25.4	38.1	50.8	63.5	76.2	101.6
ID	22.2	34.9	47.6	60.3	72.6	97.4
Ød	89	89	89	89	108	108


Sanitary Clamp

Dimensions	1"	1½"	2"	2½"	3"	4"
A	275	281	301	308	321	353
B	79	85	105	112	125	157
C	68	76	80	80	82	89
OD	25.4	38.1	50.8	63.5	76.2	101.6
ID	22.2	34.9	47.6	60.3	72.6	97.4
Ød	89	89	89	89	108	108

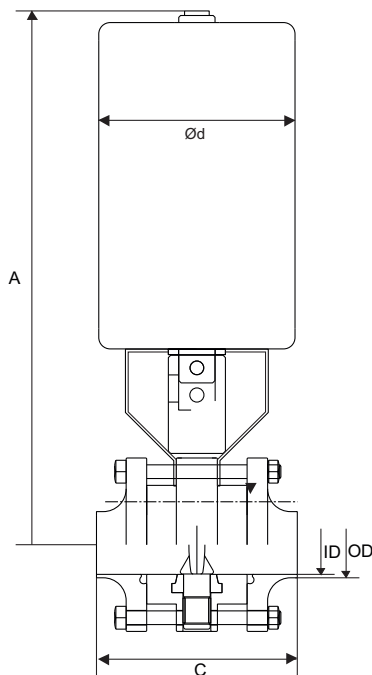
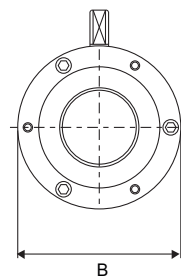


Dimensions ISO (mm)



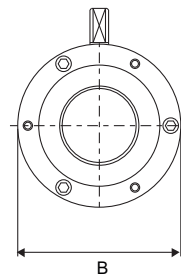
I-Line

Dimensions	1"	1½"	2"	2½"	3"	4"
A	275	281	301	308	321	353
B	79	85	105	112	125	157
C	75	75	86	84	92	110
OD	25.4	38.1	50.8	63.5	76.2	101.6
ID	22.2	34.9	47.6	60.3	72.6	97.4
Ød	89	89	89	89	108	108



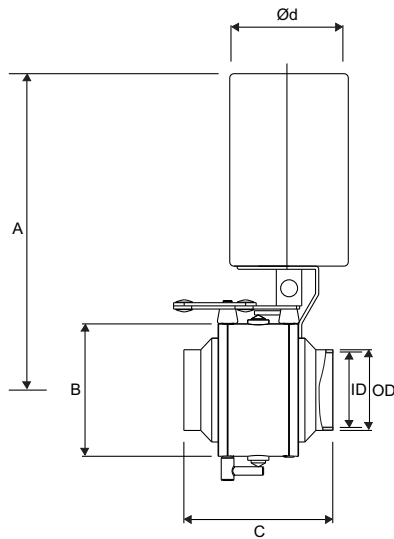
Intermediate Flange

Dimensions	1"	1½"	2"	2½"	3"	4"
A	281	285	294	298	304	321
B	79	85	105	112	125	157
C	88	88	88	88	94	94
OD	25.4	38.1	50.8	63.5	76.2	101.6
ID	22.2	34.9	47.6	60.3	72.6	97.4
Ød	89	89	89	89	108	108

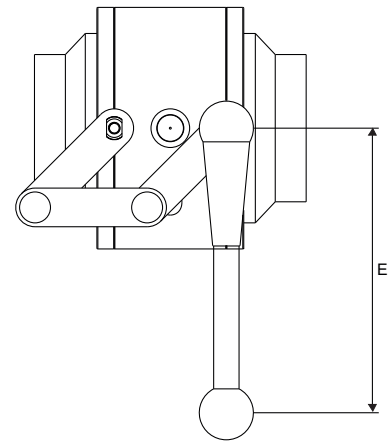


Dimensions ISO (mm)

Block & Bleed Butterfly Valve



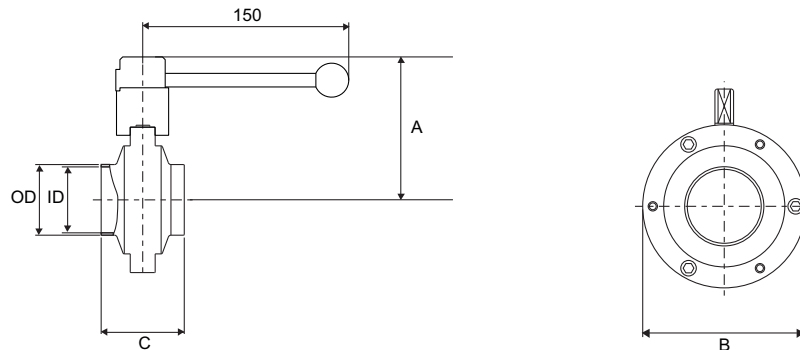
Actuated Valve



Manual Valve

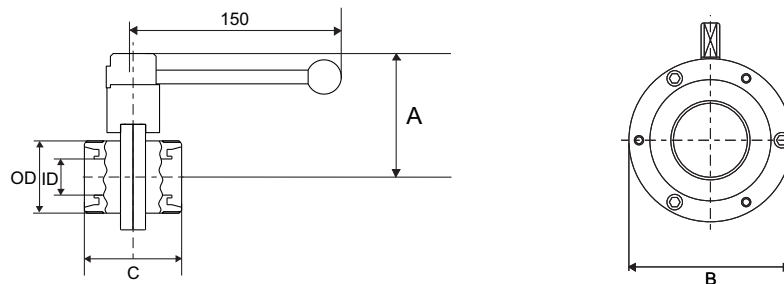
Butt-Weld

Dimensions	1"	1 ½"	2"	2 ½"	3"	4"
A	275	281	301	308	321	353
B	79	85	105	112	125	157
C	128	128	128	133	143	143
D	88	88	88	88	108	108
E	150	150	177	177	177	177
OD	25.4	38.1	50.8	63.5	76.2	101.6
ID	22.2	34.9	47.6	60.3	72.6	97.4

Dimensions DIN (mm)

Butt-Weld

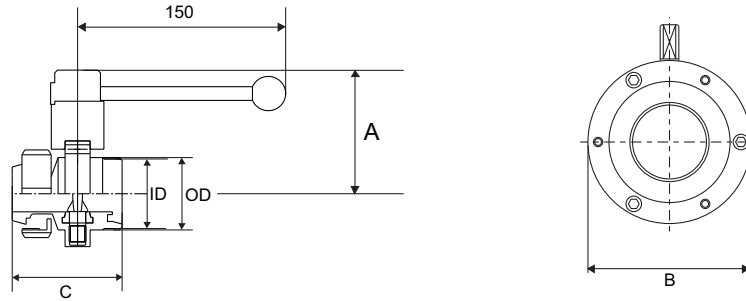
Dimensions	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100
A	84	91	98	105	116	124
B	76	91	105	120	140	157
C	50	50	50	50	72	72
OD	29	41	53	70	85	104
ID	26	38	50	66	81	100

* Consult the factory for DN-32 Size.


Male Part

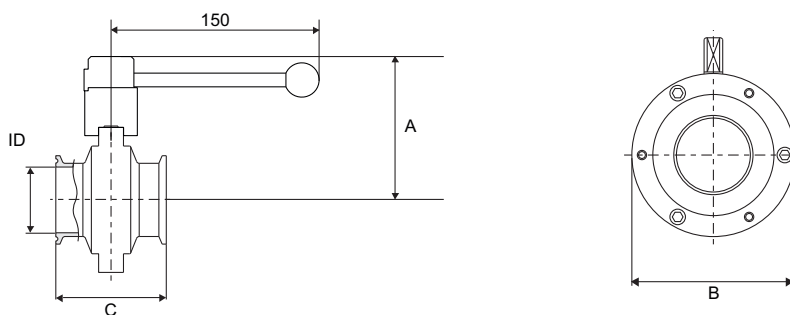
Dimensions	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100
A	84	91	98	105	116	124
B	76	91	105	120	140	157
C	64	64	72	72	72	84
OD	52 x 1/6 Thd	65 x 1/6 Thd	78 x 1/6 Thd	95 x 1/6 Thd	110 x 1/4 Thd	130 x 1/4 Thd
ID	26	38	50	66	81	100

* Consult the factory for DN-32 Size.

Dimensions DIN (mm)

Male x (nut + liner)

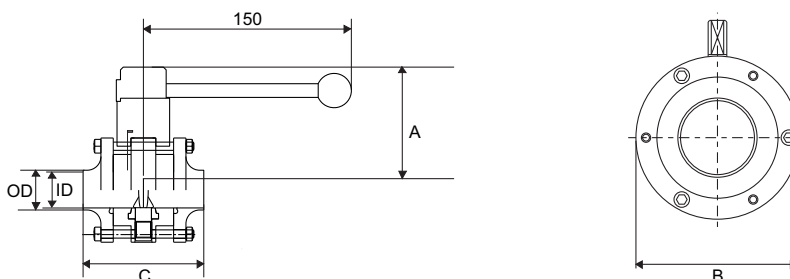
Dimensions	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100
A	84	91	98	105	116	124
B	76	91	105	120	140	157
C	79	79	86	90	96	102
OD	52 x 1/6 Thd	65 x 1/6 Thd	78 x 1/6 Thd	95 x 1/6 Thd	110 x 1/4 Thd	130 x 1/4 Thd
ID	26	38	50	66	81	100

* Consult the factory for DN-32 Size.

Dimensions DIN (mm)

Sanitary Clamp

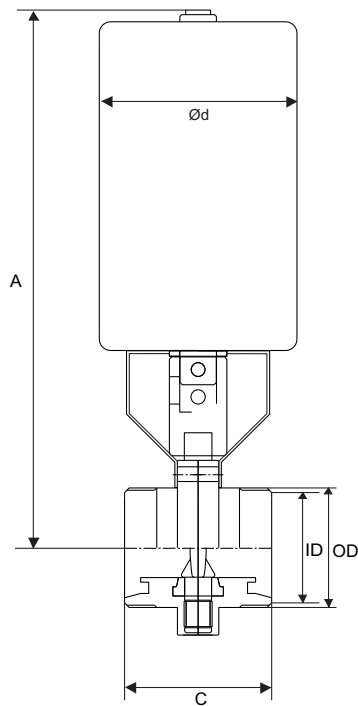
Dimensions	25	40	50	65	80	100
A	84	91	98	105	116	124
B	76	91	105	120	140	157
C	68	76	80	80	80	89
ID	26.0	38.0	50.0	66.0	81.0	100.0

* Consult the factory for DN-32 Size.

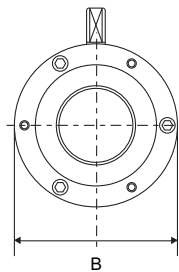
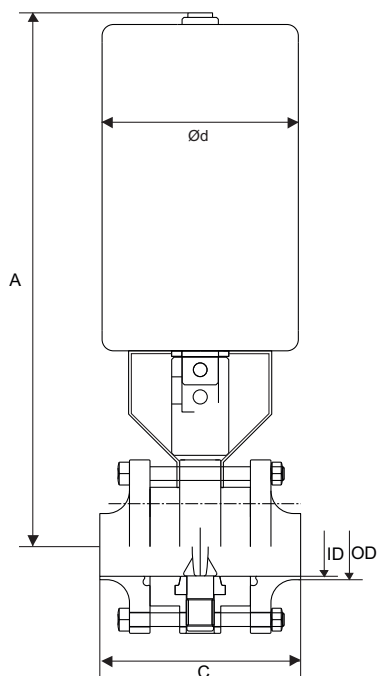

Intermediate Flange

Dimensions	25	40	50	65	80	100
A	84	91	98	105	116	124
B	76	91	105	120	140	157
C	88	88	88	88	94	94
OD	29.0	41.0	53.0	70.0	85.0	104.0
ID	26.0	38.0	50.0	66.0	81.0	100.0

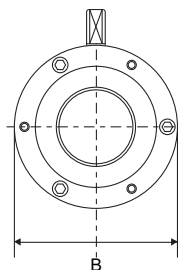
* Consult the factory for DN-32 Size.

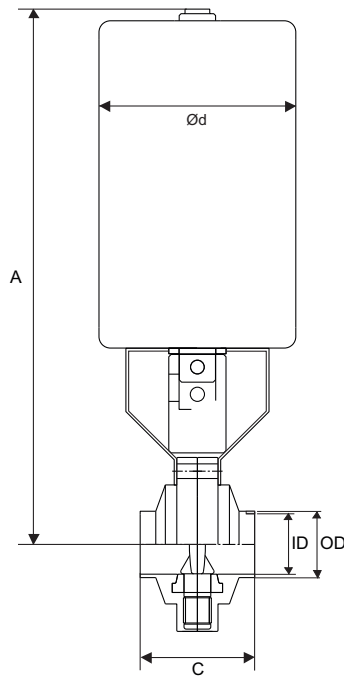
Dimensions DIN (mm)

Male Part

Dimensions	25	40	50	65	80	100
A	272	287	301	316	336	353
B	76	91	105	120	140	157
C	64	64	72	72	72	84
OD	52x1/6 Thd	65x1/6 Thd	78x1/6 Thd	95x1/6 Thd	110x1/4 Thd	130x1/4 Thd
ID	26	38	50	66	81	100
Ød	89	89	89	89	108	108

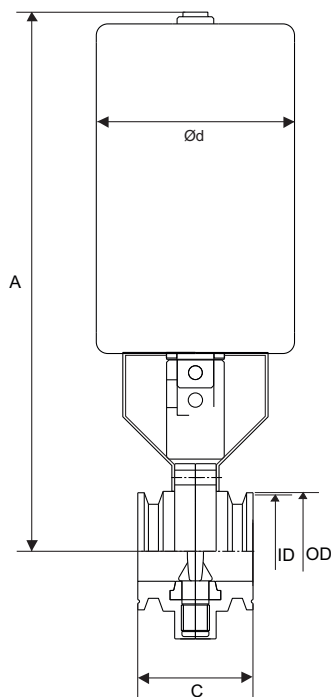
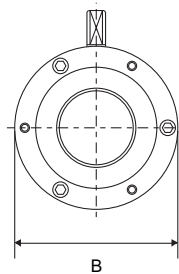

Intermediate Flange


Dimensions	25	40	50	65	80	100
A	272	287	301	316	336	353
B	76	91	105	120	140	157
C	88	88	88	88	94	94
OD	29	41	53	70	85	104
ID	26	38	50	66	81	100
Ød	89	89	89	89	108	108

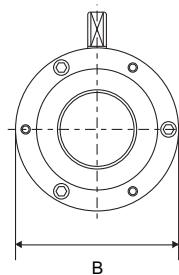


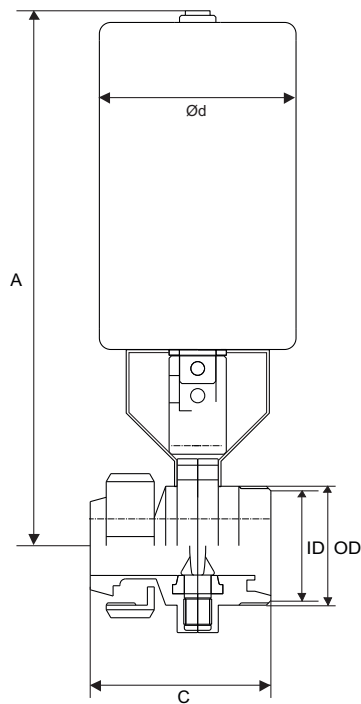
Dimensions DIN (mm)

Butt-Weld

Dimensions	25	40	50	65	80	100
A	272	287	301	316	336	353
B	76	91	105	120	140	157
C	50	50	50	50	72	72
OD	29	41	53	70	85	104
ID	26	38	50	66	81	100

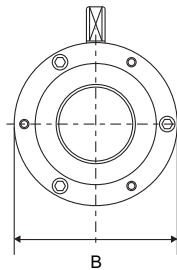

Sanitary Clamp

Dimensions	25	40	50	65	80	100
A	272	287	301	316	336	353
B	76	91	105	120	140	157
C	68	76	80	80	82	89
OD	29	41	53	70	85	104
ID	26	38	50	66	81	100
Ød	89	89	89	89	108	108



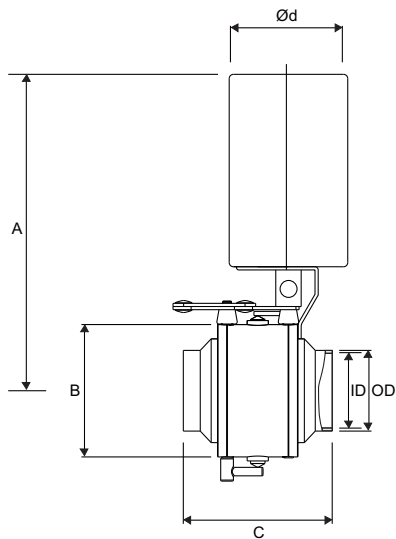
Dimensions DIN (mm)

Male x (nut + liner)

Dimensions	25	40	50	65	80	100
A	272	287	301	316	336	353
B	76	91	105	120	140	157
C	79	79	86	90	96	102
OD	52x1/6 Thd	65x1/6 Thd	78x1/6 Thd	95x1/6 Thd	110x1/4 Thd	130x1/4 Thd
ID	26	38	50	66	81	100
Ød	89	89	89	89	108	108

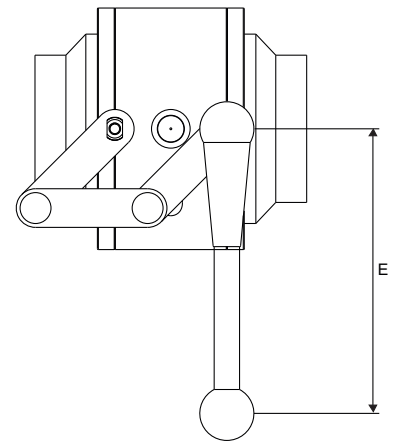


Dimensions DIN (mm)

Block & Bleed Butterfly Valve



Actuated Valve



Manual Valve

Butt-Weld

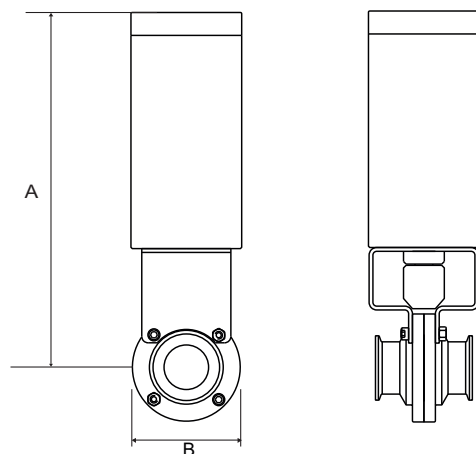
Dimensions	25	40	50	65	80	100
A	275	287	301	316	336	353
B	79	91	105	112	140	157
C	128	128	128	133	143	143
D	88	88	88	88	108	108
E	150	150	177	177	177	177
OD	29	41	53	70	85	104
ID	26	38	50	66	81	100

Vertical Actuator Specifications

Pressure	: Upto 8 bar
Temperature	: -20° to 80° C
Media	: Air (dry or lubricated) , Non-corrosive gas or light hydraulic oil
Construction	: Suitable for indoor or outdoor installation
Material	: AISI 304 Stainless steel
Finish	: Polish Bright Color
Rotation (Standard)	: To open with Air inlet port pressurised Spring return Actuators air fail to close
Movement (Std.)	: 91° from - 0° to 91° counter clockwise
Lubrication	: Factory lubricated for the normal life of Actuators
Life	: 100,000 operations minimum

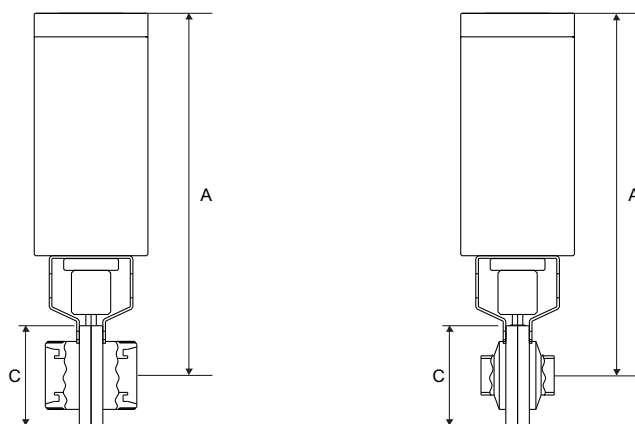
Actuator Torque - AT 90 PSI

MODEL			8C4/8C5-35	8C4/8C5-40
AIR TO AIR TORQUE (Nm)			72	84
AIR TO SPRING TORQUE (Nm)	SPRING STROKE	END	35	40
		START	26	28
	AIR STROKE	END	46	74
		START	34	40


Vertical Actuators - 8C4 (Air / Spring) 8C5 (Air / Air)

VALVE SIZE	1"	1 ½"	2"	2 ½"	3"	4"
ACTUATOR SIZE (D)	89				108	
A	275	281	301	308	321	353
B	79	85	105	112	125	157

Vertical Actuator Specifications



Vertical Actuators - 8C4 (Air / Spring) 8C5 (Air / Air)

VALVE SIZE	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100
ACTUATOR SIZE (D)	89				108	
A	301	308	315	323	336	344
C	76	91	105	120	140	157

Horizontal Actuator Specifications

Pressure	: Upto 8 bar
Temperature	: -20° to 80° C
Media	: Air (dry or lubricated) , Non-corrosive gas or light hydraulic oil
Construction	: Suitable for indoor or outdoor installation
Material	: Housing-Aluminium Alloy
Finish	: Two coat polyurethane
Rotation (Standard)	: Counter clockwise to open with port 'A' pressurised Spring return Actuators air fail to close clockwise
Movement (Std.)	: 91.5° from -0.5° to 91° counter clockwise
Lubrication	: Factory lubricated for the normal life of Actuators
Life	: 500,000 operations minimum

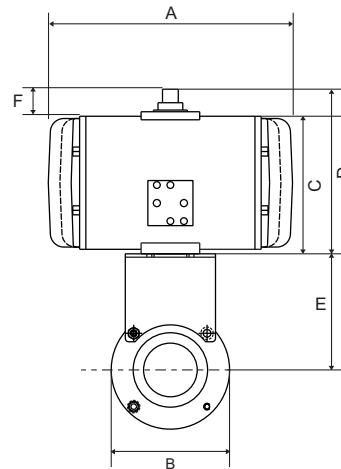
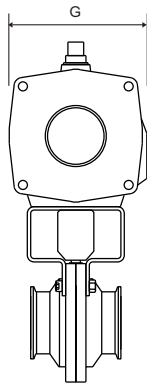
Actuator Torque - AT 90 PSI

MODEL			CH 52	CH 63	CH 83
SR TORQUE (Nm)					
SR TORQUE (Nm)	SPRING STROKE	END	6.7	10.9	31.6
		START	9.9	16.7	31.6
	AIR STROKE	END	14.1	27.0	48.0
		START	17.1	32.8	62.4

MODEL			CH 52	CH 63	CH 83	CH 92	CH 105
DA TORQUE (Nm)							
SR TORQUE (Nm)	AIR STROKE	END	-	-	-	-	-
		START	24	44	94	135	198

Recommended Horizontal Actuator Model (Double Acting / Spring Return)

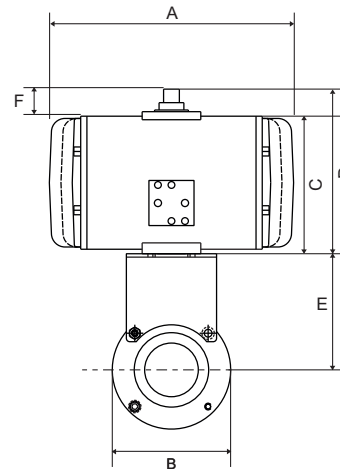
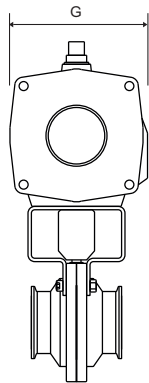
	1"	1 ½"	2"	2 ½"	3"	4"
Double Acting	CHD-52	CHD-52	CHD-52	CHD-63	CHD-63	CHD-63
Spring Return	CHS-52	CHS-52	CHS-63	CHS-63	CHS-83	CHS-83

Dimensions ISO (mm)

Horizontal Actuators Spring Return

VALVE SIZE	1"	1 ½"	2"	2 ½"	3"	4"
ACTUATOR SIZE	CHS-52	CHS-52	CHS-63	CHS-63	CHS-83	CHS-83
A	147	147	168	168	204	204
B	79	85	105	112	125	157
C	65.5	65.5	81	81	98.5	98.5
D	92	92	108	108	128.7	128.7
E	88	93	103	107	119	135
F	12	12	12	12	12	12
G	71.5	71.5	83	83	103	103

Horizontal Actuators Double Acting

VALVE SIZE	1"	1 ½"	2"	2 ½"	3"	4"
ACTUATOR SIZE	CHD-52	CHD-52	CHD-52	CHD-63	CHD-63	CHD-63
A	147	147	147	168	168	168
B	79	85	105	112	125	157
C	65.5	65.5	65.5	81	81	81
D	92	92	92	108	108	108
E	88	93	103	107	119	135
F	12	12	12	12	12	12
G	71.5	71.5	71.5	83	83	83

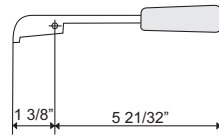
Dimensions DIN (mm)

Horizontal Actuators Spring Return

VALVE SIZE	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100
ACTUATOR SIZE	CHS-52	CHS-52	CHS-63	CHS-63	CHS-83	CHS-83
A	147	147	168	168	204	204
B	76	91	105	120	140	157
C	65.5	65.5	81	81	98.5	98.5
D	92	92	108	108	128.7	128.7
E	88	93	103	107	119	135
F	12	12	12	12	12	12
G	71.5	71.5	83	83	103	103

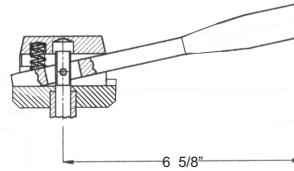
Horizontal Actuators Double Acting

VALVE SIZE	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100
ACTUATOR SIZE	CHD-52	CHD-52	CHD-52	CHD-63	CHD-63	CHD-63
A	147	147	147	168	168	168
B	76	91	105	120	140	157
C	65.5	65.5	65.5	81	81	81
D	92	92	92	108	108	108
E	88	93	103	107	119	135
F	12	12	12	12	12	12
G	71.5	71.5	71.5	83	83	83

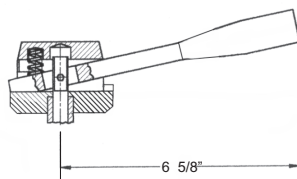
Handles



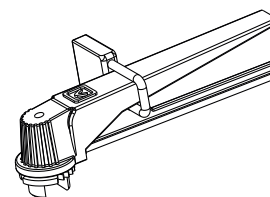
2 Position Old Style (7M2) (Fang)



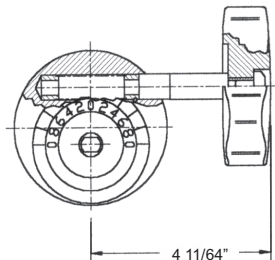
2 Position S.S (7M3)



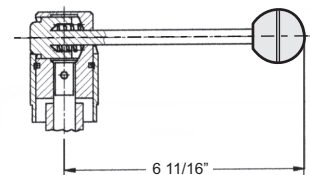
10 Position S.S (7M4)



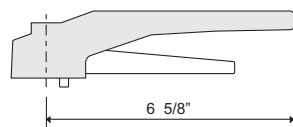
Multi Position Lockable Handle (7M5)



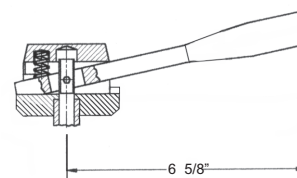
Micro-Metric (fine tuning) (7M6)



2 Position Pull Type (7M7)



Black - Standard 2 Position (7M8)
(Optional Color - Blue)

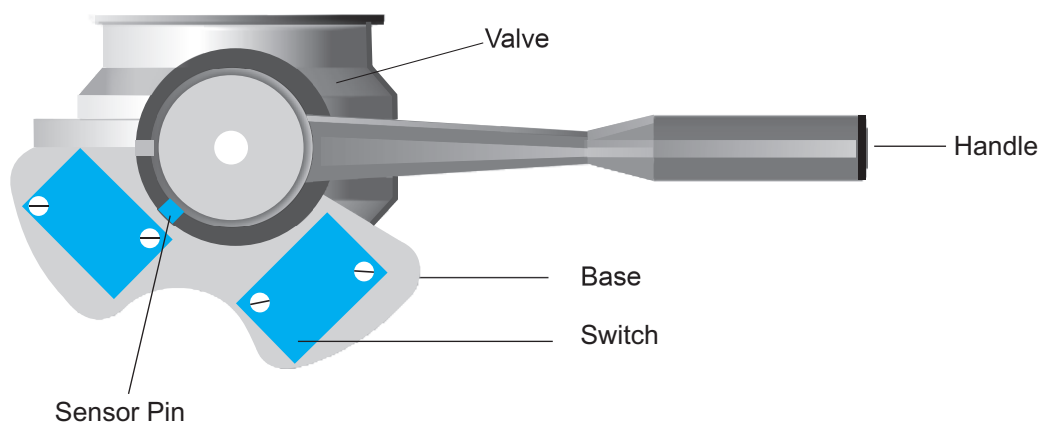


3 Position S.S (7M10)

Valve with Inductive proximity switch

Specifications :

Handle	: All stainless steel snapping handle
Operating Voltage	: 10-30 VDC
Output	: DC PNP/NPN/NO/NC
Output LED	: Yes
Protection	: IP 67
Reverse Polarity Protection	: Yes
Cable	: 2 Wire, 2 Meter Long





100 Series Butterfly Valve Ordering System

