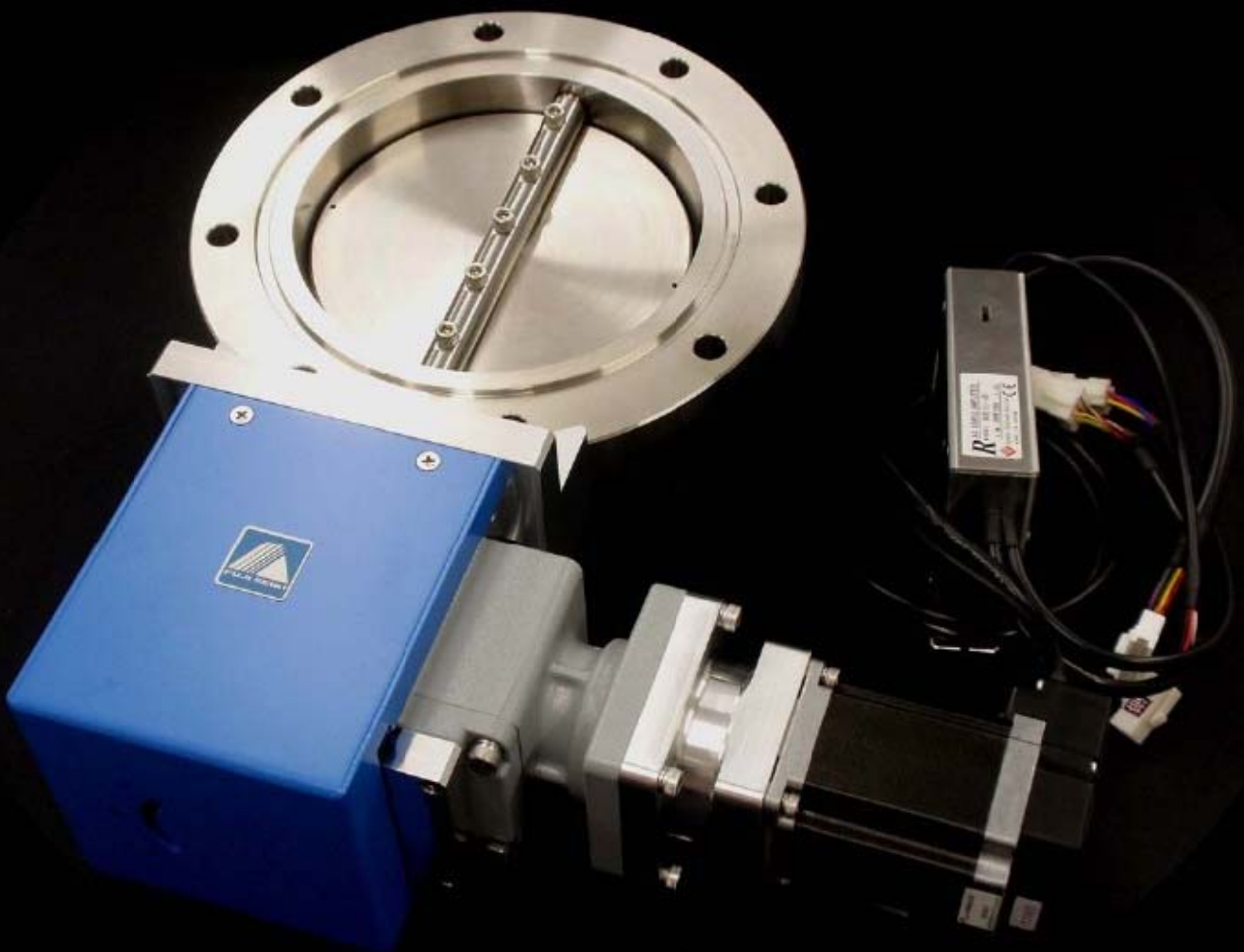


High-Performance Motor Drive Butterfly Valves

MBV-LD Series

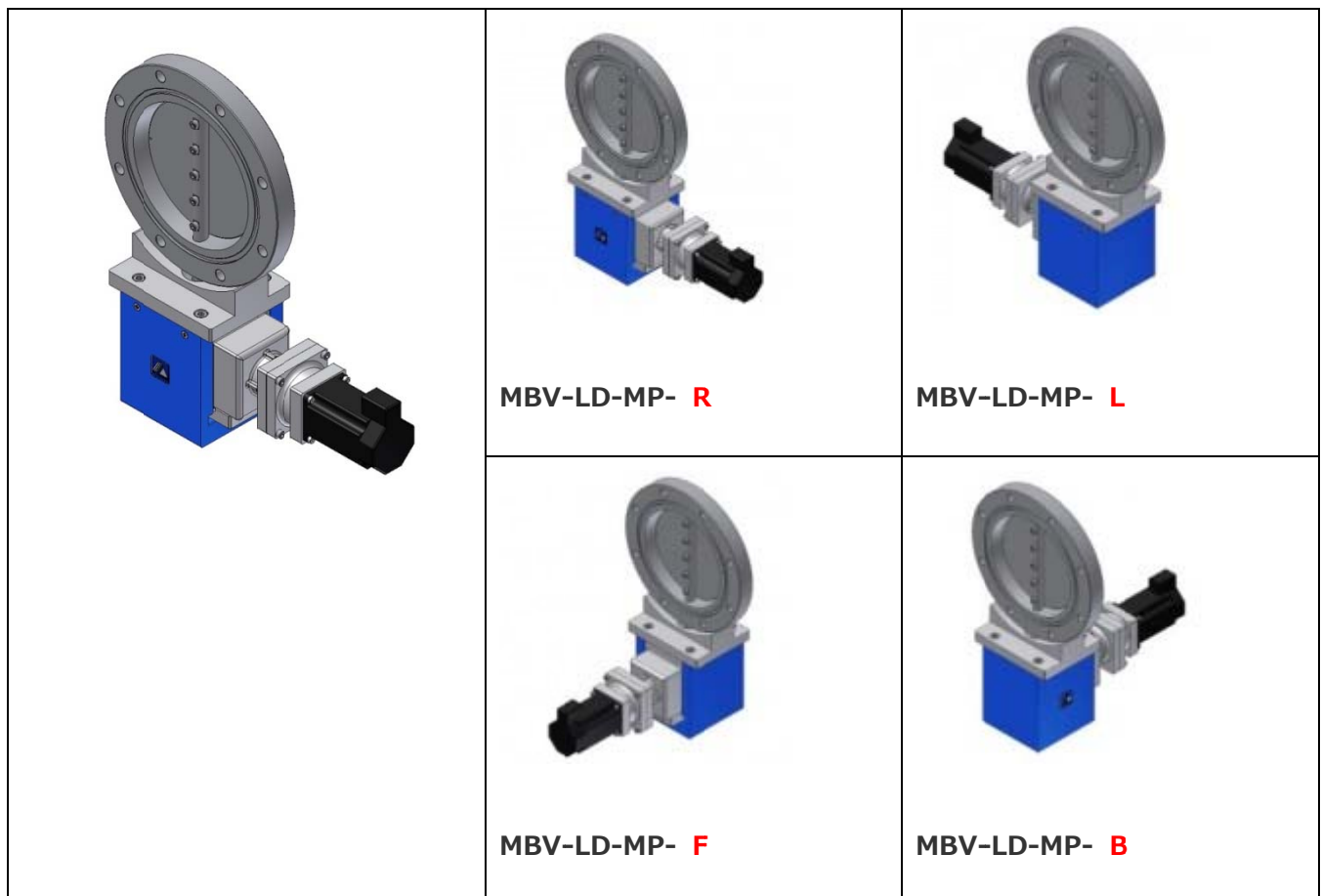
Washed cleanly used for high-vacuum



Motor-driven butterfly valve MBV-LD-MP series

It is a butterfly valve which features long service life, low price and high performance, and can be on-off operation in various forms.

1. Long service life : 500,000-1,000,000 cycles
2. Low price : Low price and automatic pressure control
3. High performance : High-efficiency servo motor and new driven mechanism
4. Various functions : Fully closed, multi-position control, self-operated control for pressure and motor position selection. (four positions for motor : Right, Left, Front, Back)



Features

1. Fully closed (shut-off valve) and conductance adjustment can be performed within one valve, and the minimum conductance can also be controlled.
2. It can be started in a differential pressure state (vacuum-atmospheric pressure).
3. The repeatability of stop position accuracy is better due to high-accuracy Gear head.

4. Except the fully open position and the fully closed position, the valve can be stopped in any of 14 positions at most. Positions setting can be done easily with the teaching box or PC software.
5. Optional parts for automatic pressure control are available on request.
6. The position of the valve disc element can be confirmed from the outside of the machine body by an angle indicator.
7. The position of the motor can be selected, so that various internal layouts can be handled flexibly, and the arranged exhaust system space can be effectively utilized.
8. A standard photon sensor used for position detection of the fully closed position is equipped.

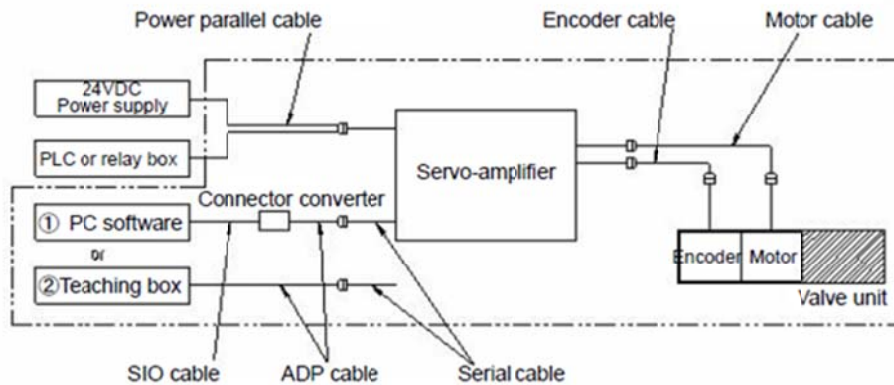
Main specifications

Flange type	JIS · ISO · CF · NW	Port Diameter	25A ~ 250A
Leakage rate	1×10^{-9} Pa · m ³ /s or less	Power Specifications	actuated : DC 24V (max. 3.0A) control : DC 24V (max. 0.2A)
Pressure range	$10^5 \sim 10^{-5}$ Pa		
Disc sealing	Viton O-ring	Driven mechanism	AC Servo motor
Shaft sealing	Viton O-ring two-stage	Wetted parts (Gas contact) material	SUS 304

※ This standard shall be subject to changes without prior notice.

※ The products in special specifications can be manufactured, so please consult for details.

System configuration



※ Included in the valve unit : Valve body 、 Servo motor 、 Servo-amplifier

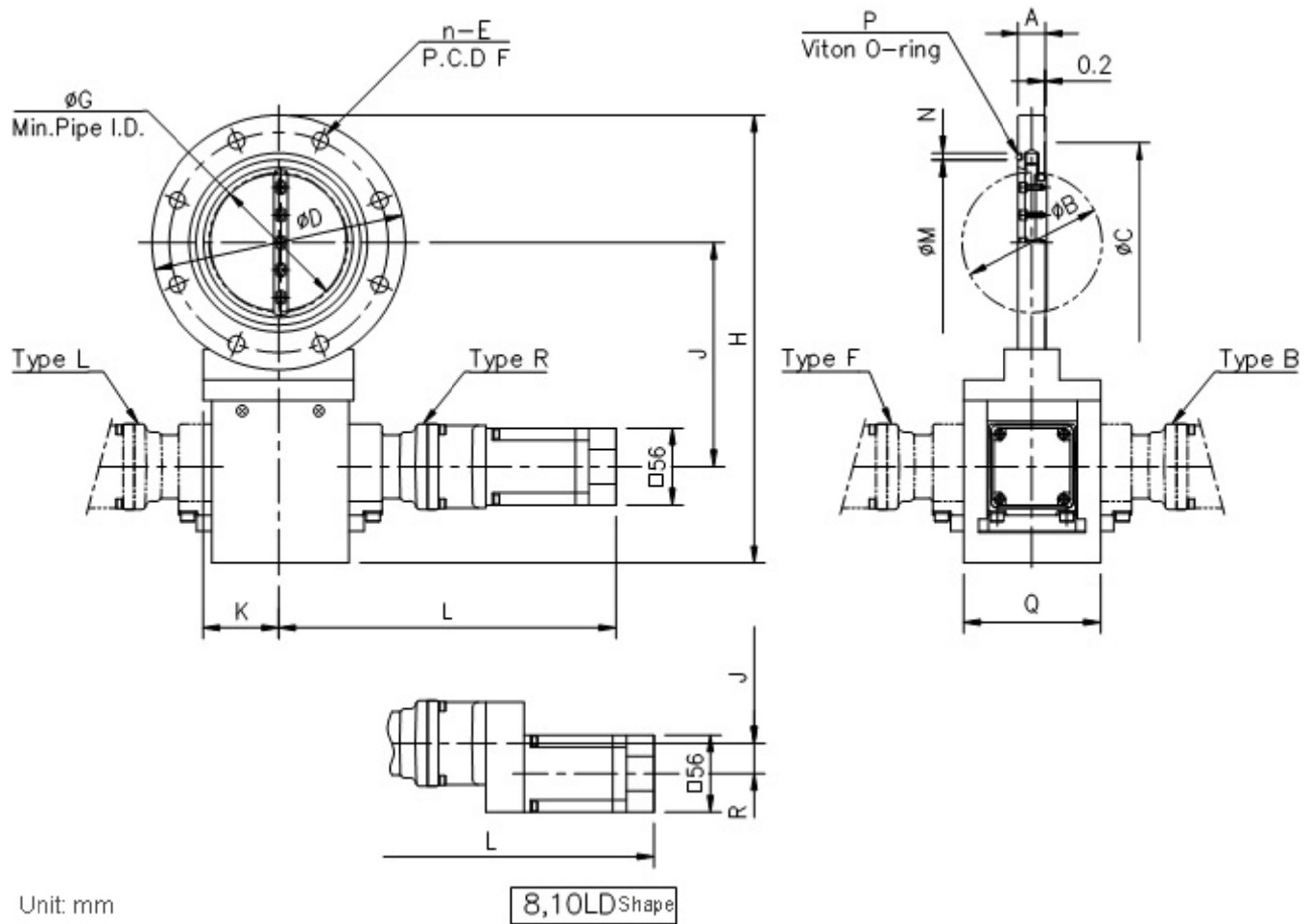
(please refer to the “optional selection list” other than those above.)

※ The optional accessories shall be determined in accordance with the attached table
Purchase Guide.

[Other corresponding motors except standard motor]

Please contact us if the products such as other servo motors except that the standard motor are required to be replaced in accordance with the equipment use environment of your company.
The change of the specification due to product improvement will not be informed in advance.

For example: AC servomotor MR-J3 series 、 MR-J4 series 、 and the like manufactured by Mitsubishi Electric Corporation.



MBV-JIS LD-MP Series dimension drawing

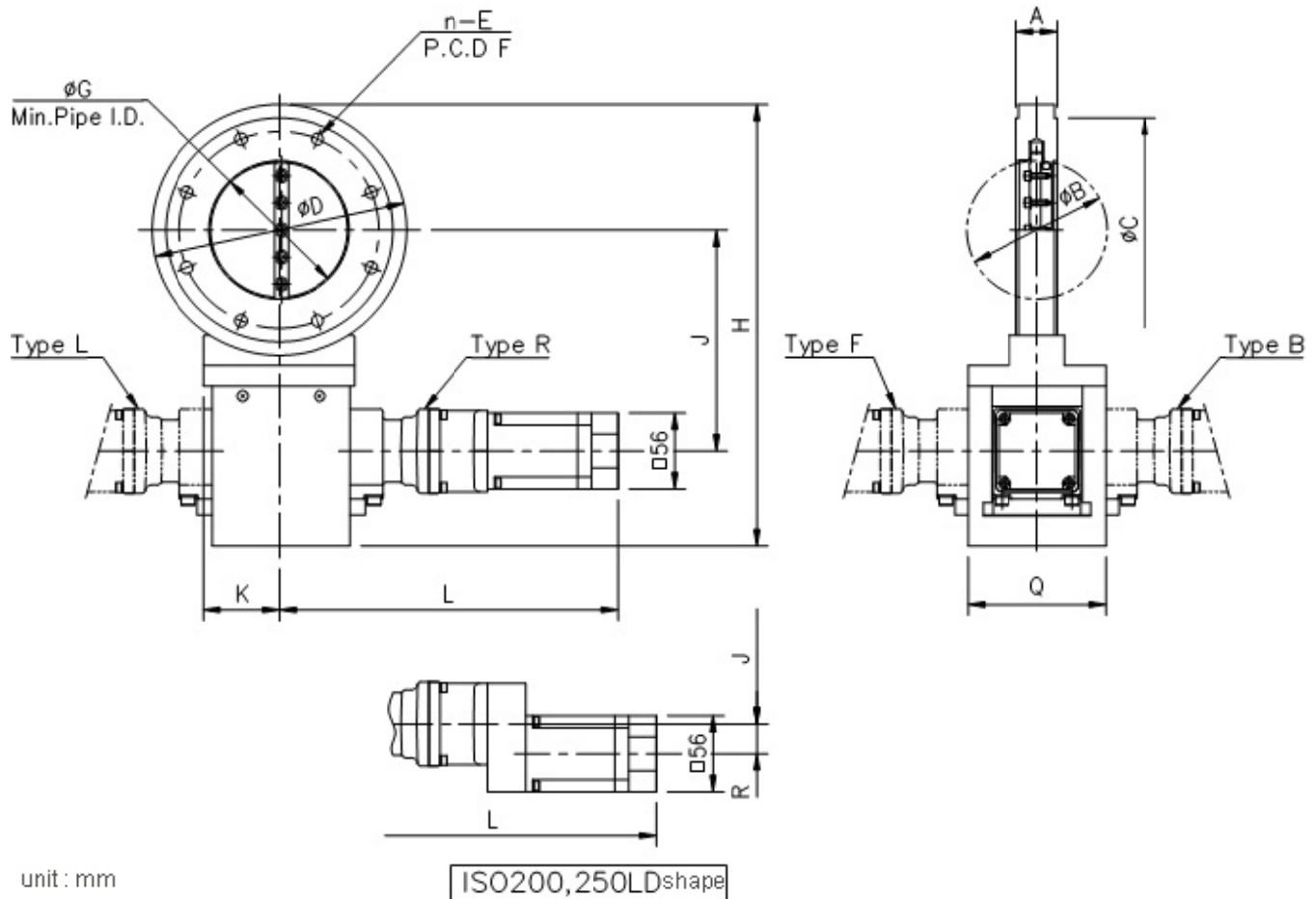
Note 1: The below is the flange produced in accordance with JIS B 2290 Vacuum Flange.

Note 2: The station type of the motor is filled in the parentheses behind the model

(it can be selected from 4 positions)

The change of the specification due to product improvement will not be informed in advance.

Type	MBV-1LD -MP-()	MBV-2LD -MP-()	MBV-2.5LD -MP-()	MBV-3LD -MP-()	MBV-4LD -MP-()	MBV-6LD -MP-()	MBV-8LD -MP-()	MBV-10LD -MP-()
Commodity code	10705□□	10707□□	10708□□	10709□□	10710□□	10711□□	10712□□	10713□□
A	20	20	20	20	20	26	40	40
B	34	52	65	80	102	155	208	257
C	58	88	105	120	145	190	250	302
D	90	120	145	160	185	235	300	350
n—E	4-φ10	4-φ10	4-φ12	4-φ12	8-φ12	8-φ12	8-φ15	12-φ15
F	70	100	120	135	160	210	270	320
G	32	51	64	79	101	154	206	253
H	230.5	260.5	285.5	300.5	325.5	389	456.5	506.5
J	115.5	130.5	143	150.5	163	194	229	254
K	55	55	49	49	55	70	85	85
L	245	245	246	246	246.5	264	292	292.5
M	40	70	85	100	120	175	225	275
N	5	5	5	5	5	5	8	8
P	V40	V70	V85	V100	V120	V175	V225	V275
Q	100	100	100	100	100	110	110	110
R	—	—	—	—	—	—	22	22



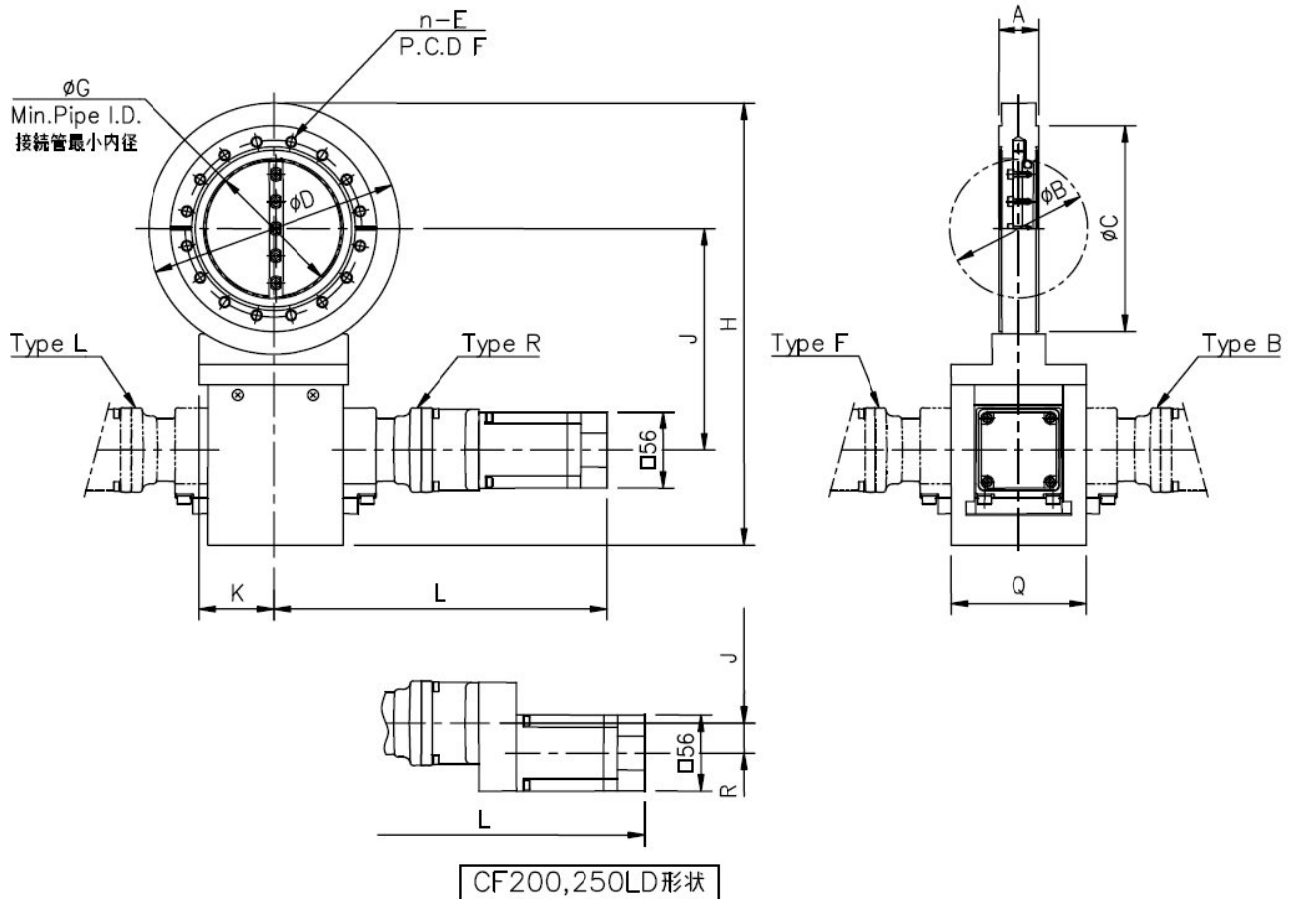
MBV-ISO LD-MP Series dimension drawing

Note 1: The below is the flange produced in accordance with ISO 1609 Vacuum technology-Flange dimensions.

Note 2: The station type of the motor is filled in the parentheses behind the model
(it can be selected from 4 positions)

The change of the specification due to product improvement will not be informed in advance.

Model	MBV-ISO40LD -MP-()	MBV-ISO50LD -MP-()	MBV-ISO63LD -MP-()	MBV-ISO80LD -MP-()	MBV-ISO100LD -MP-()	MBV-ISO160LD -MP-()	MBV-ISO200LD -MP-()	MBV-ISO250LD -MP-()
Item Code	10765 □ □	10766 □ □	10767 □ □	10767 □ □	10768 □ □	10770 □ □	10771 □ □	10772 □ □
A	30	30	30	30	30	50	50	50
B	34	52	65	80	102	155	208	257
C	100	110	130	145	165	225	285	335
D	120	120	145	160	185	235	300	350
n-E	4-φ7	4-φ9	4-φ9	8-φ9	8-φ9	8-φ11	12-φ11	12-φ11
F	80	90	110	125	145	200	260	310
G	20	45	59	74	97	144	199	249
H	260.5	260.5	285.5	300.5	325.5	389	456.5	506.5
J	130.5	130.5	143	150.5	163	194	229	254
K	55	55	49	49	55	70	85	85
L	245	245	246	246	246.5	264	292	292.5
Q	100	100	100	100	100	110	110	110
R	-	-	-	-	-	-	22	22



MBV-CF LD-MP Series dimension drawing

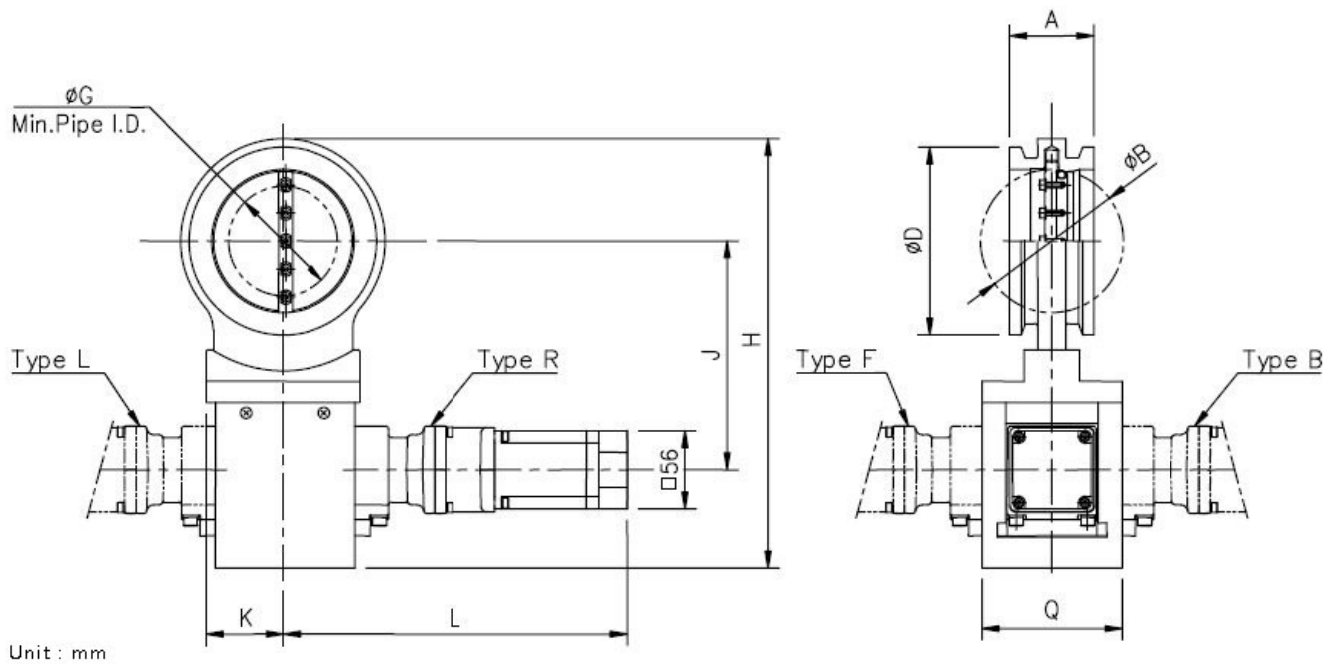
Note 1: The below is the flange produced in accordance with ISO 3669 Vacuum technology-Bakeable flanges dimensions.

Note 2: The station type of the motor is filled in the parentheses behind the model
(it can be selected from 4 positions)

Note 3: There is no groove on CF40 flange for leak detection.

The change of the specification due to product improvement will not be informed in advance.

型式	MBV-CF40LD -MP-()	MBV-CF63LD -MP-()	MBV-CF100LD -MP-()	MBV-CF160LD -MP-()	MBV-CF200LD -MP-()	MBV-CF250LD -MP-()
商品コード	10740□□	10742□□	10744□□	10745□□	10746□□	10747□□
A	30	30	30	50	50	50
B	34	52	102	155	208	257
C	69.4	113.5	151.6	202.4	253.2	305.0
D	90	120	185	235	300	350
n—E	6-M6	8-M8	16-M8	20-M8	24-M8	32-M8
F	58.7	92.1	130.2	181	231.8	284
G	20	45	97	144	199	249
H	230.5	260.5	325.5	389	456.5	506.5
J	115.5	130.5	163	194	229	254
K	55	55	55	70	85	85
L	245	245	246.5	264	292	292.5
Q	100	100	100	110	110	110
R	—	—	—	—	22	22



MBV-NW-LD-MP Series dimension drawing

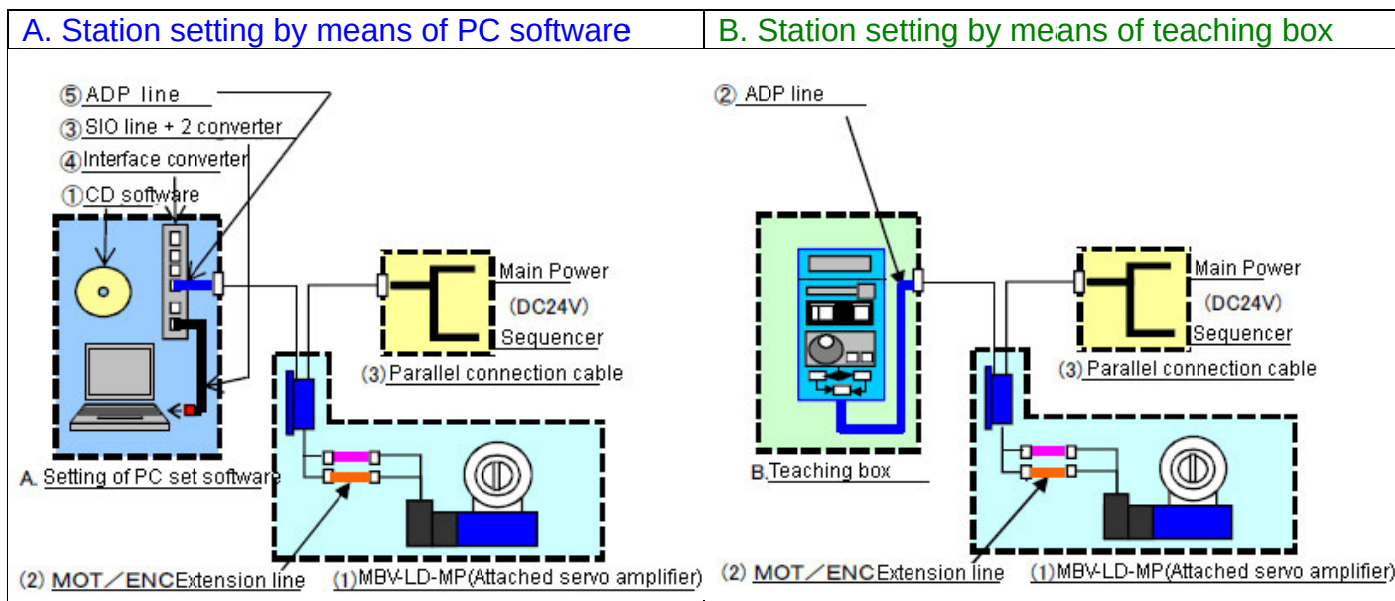
Note 1: Please use the multifunctional tongs (Multi-Clump made by Fuji Technology) of the company during installation. If other pliers beyond the company are used, installation may not be performed due to the shape of the pliers.

※ The change of the specification due to product improvement will not be informed in advance.

Type	MBV-NW40LD-MP-()	MBV-NW50LD-MP-()	MBV-NW63LD-MP-()	MBV-NW80LD-MP-()	MBV-NW100LD-MP-()	MBV-NW160LD-MP-()
Commodity code	10724□□	10725□□	10726□□	10727□□	10728□□	10730□□
A	40	40	40	60	60	66
B	34	52	65	80	102	155
D	55	75	87	114	134	190
G	0	25	56	44	78	143
H	215.5	239.5	259	280.5	306	368.5
J	115.5	130.5	143	150.5	163	194
K	55	55	49	49	55	70
L	245	245	246	246	246.5	264
Q	100	100	100	100	100	110

Motor-driven butterfly valve (MBV-LD-MP) Multi-station system purchase guide

Purchase guide of motor-driven butterfly valve (MBV-LD-MP) multi-station system
Except fully closed and fully opened on the servo amplifier equipped with the motor-driven butterfly valve (MBV-LD-MP), 14 stations can be set at most. A superior system such as a sequencer sends a signal, so that the opening of any station can be adjusted rapidly and smoothly. If station setting is required, optional accessories such as PC software or teaching box shall be purchased.



1. Joint purchase and accessory selection

No	Pic no	Parts name	Description / Remarks
1	(1)	Control valve (attached servo amplifier)	Select the specification and caliber of the flange in accordance with the purpose from the motor-driven butterfly valve MBV-LD-MP series.
2	(2)	MOT/ENC extension line	1m-long cable between valve magnifiers The cable for extension is selected from the attached table (list of optional accessories) (sold separately)
3	(3)	Parallel connection cable	The cable used for the superior system such as the sequencer for sending a station action command to the valve, or used for connecting the main power supply, and the length of the cable is selected from the attached table (list of optional accessories) (sold separately).

2. Type of station setting methods Purchase and select the accessories (tools for setting 14 stations, A or B shall be purchased)

A. Station setting by means of PC software

No	Pic no	Parts name	Description / Remarks
4	A.	PC set software (setting) 「TBVST-FT-JP-SET」 Jap. version or 「TBVST-FT-EN-SET」 Eng. version	Content to be set Figures in the parentheses are the quantity. ① CD software ◦ TBVST-FT-JP(or EN) (1) ② converter ◦ ADP-1 (1) ③ SIO line ◦ RP9041-010(1M) (1) ④ Interface converter ⑤ ADP line ◦ RP9050-010(1M) (1) *③ and ⑤ shall be set into 1m, and if the length is insufficient, it can be selected from the attached table (list of optional accessories) (sold separately)

B. Station setting by means of teaching box

No	Pic no	Parts name	Description / Remarks
5	B.	Teaching box	Content to be set Figures in the parentheses are the quantity. ① Teaching box (1) ② ADP line ◦ RP9050-010(1M) (1) *② shall be set into 1m, and if the length is insufficient, it can be selected from the attached table (list of optional accessories) (sold separately)

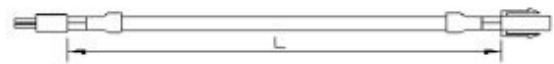
Option list of motor-driven butterfly valve MBV-LD-MP

1. MOT/ENC extension line (setting)

It is the cable used for connecting the valve and the servo amplifier.

Commodity code	Model	Length(L)	Price
4122202	RP9135-010	1m	P. O. R.
4122204	RP9135-020	2m	P. O. R.
4122206	RP9135-030	3m	P. O. R.
4122208	RP9135-040	4m	P. O. R.
4122210	RP9135-050	5m	P. O. R.
4122218	RP9135-090	9m	P. O. R.
4122220	RP9135-100	10m	P. O. R.
4122230	RP9135-150	15m	P. O. R.
4122240	RP9135-200	20m	P. O. R.

(MOT) Motor extension cable



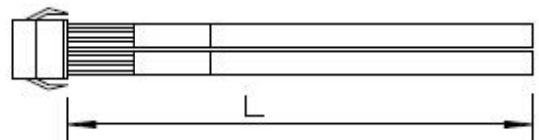
(ENC) Encoder extension cable



2. Parallel connection cable

It is the cable used for power supply of the servo amplifier.

Commodity code	Model	Length(L)	Price
4122306	RP9120-030	3m	P. O. R.
4122310	RP9120-050	5m	P. O. R.
4122320	RP9120-100	10m	P. O. R.

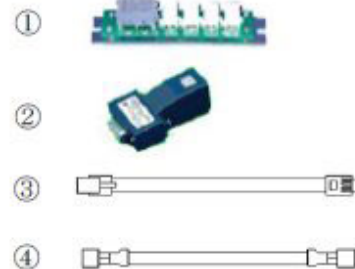


3. 1 PC software (setting)

Commodity code	Model	Remarks	Price
4122042	TBVST-FT-JP-SET	Jap. Version	P. O. R.
4122044	TBVST-FT-EN-SET	Eng. Version	P. O. R.



PC software



[PC software standard setting attachment]

- ①ADP-1 (conversion adapter) ②ADP-2-4 (interface converter)
③SIO cable ④ADP cable (1m)

3. 2 Teaching box

Commodity code	Model	Remarks	Price
4122070	CTA-23-SET	Digital display	P. O. R.



Teaching box

[Teaching box standard setting attachment]

- ① ADP cable (1m)

※ 3.1 and 3.2 are general options. If the standard setting wiring (1m) connection length is insufficient, please select the following cable length (sold separately)

SIO cable

Commodity code	Model	Length(L)	Price
4120604	RP9041-020	2m	P. O. R.
4120606	RP9041-030	3m	P. O. R.
4120610	RP9041-050	5m	P. O. R.

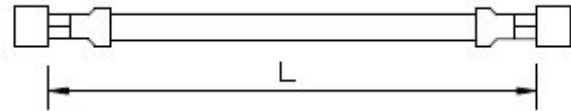
ADP cable

Commodity code	Model	Length(L)	Price
4122406	RP9050-030	3m	P. O. R.
4122410	RP9050-050	5m	P. O. R.
4122420	RP9050-100	10m	P. O. R.

4. Sensor extension line

It is the cable used for fully closed and fully opened photoelectric sensors (optional). (Basic principle: Select the length same as the MOT/ENC extension line)

Commodity code	Model	Length(L)	Price
4120602	SEC-010	1m	P. O. R.
4120604	SEC-020	2m	P. O. R.
4120606	SEC-030	3m	P. O. R.
4120608	SEC-040	4m	P. O. R.
4120610	SEC-050	5m	P. O. R.
4120618	SEC-090	9m	P. O. R.
4120620	SEC-100	10m	P. O. R.
4120630	SEC-150	15m	P. O. R.
4120640	SEC-200	20m	P. O. R.



Vacuum Butterfly Valves X-Series

Washed cleanly and used for high-vacuum



Butterfly valve AX series

The price may not be overemphasized due to its higher performance and longer life.

The buffer block in the cylinder shall be stopped

◇ With stop of the buffer block in the cylinder, the impact force generated when the valve is turned off and the force applied during standing are reduced, so that the life is prolonged, and the conductivity is improved.

※ Twin-cylinder mode (pneumatic)

◇ With the adoption of the twin-cylinder mode, when the valve is turned off, the air pushing force is doubled, and the impact force is reduced due to the air damper structure.

◇ Those provided in the cylinder chamber and assist the bypass passage is a double cylinder type.

◇ The bypass flow path connects the valve body opening side with the cylinder chamber (the piston back of the valve body closing side cylinder chamber), and the caliber of the bypass flow path is much smaller than that of the air inlet.

◇ Due to the structure, before the cylinder chamber supplies air sufficiently, the piston has been moved, and when the valve body is opened (closed), the pressure in the cylinder chamber is negative pressure, so that the impact force generated due to acting of the air cushion in the cylinder chamber can be reduced.

The butterfly valve can replace the former X-series butterfly valve at any time, and they have the same price

◇ It can be replaced immediately as its dimension is the same as that of the former X-series butterfly valve.

◇ The price is the same as that of the former X-series butterfly valve, and the cost performance is more excellent.

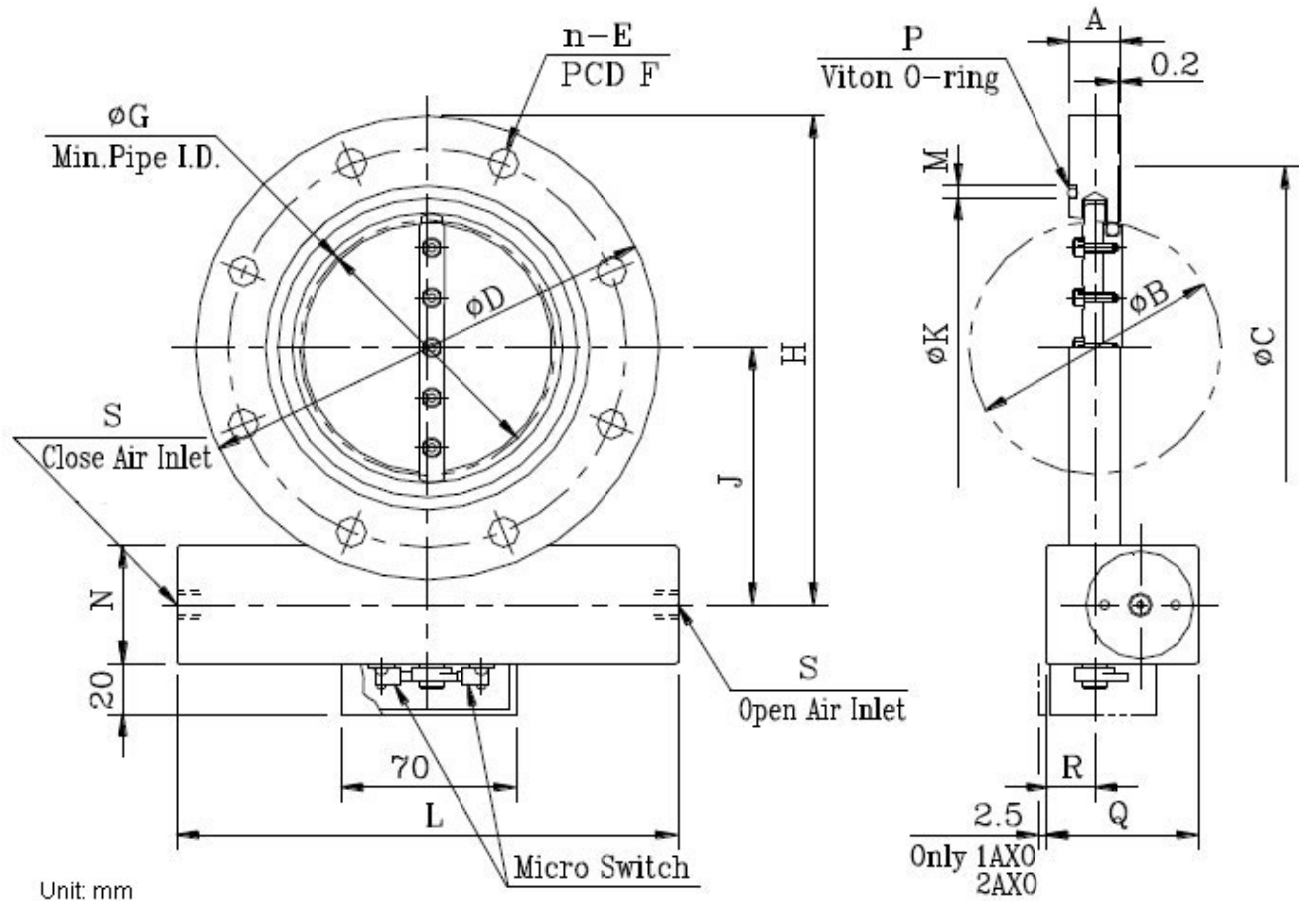
Main specifications

Flange type	JIS · NW · ISO · CF	Port Diameter	34~391(mm)
Leakage rate	1×10^{-9} Pam ³ /s or less	Wetted parts (Gas contact) material	SUS304
Pressure range	$10^5 \sim 10^{-5}$ Pa	Operating pressure	0.4~0.6MPa G
Disc sealing	Viton O-ring	Appendix	Opening and closing display Indicator
Shaft sealing	Viton O-ring two-stage		

※ A standard microswitch (automatic butterfly valve AXO type) for on-off display is equipped.

※ The change of the specification due to product improvement will not be informed in advance.

※ The products in special specification can be manufactured, so please contact us if necessary.

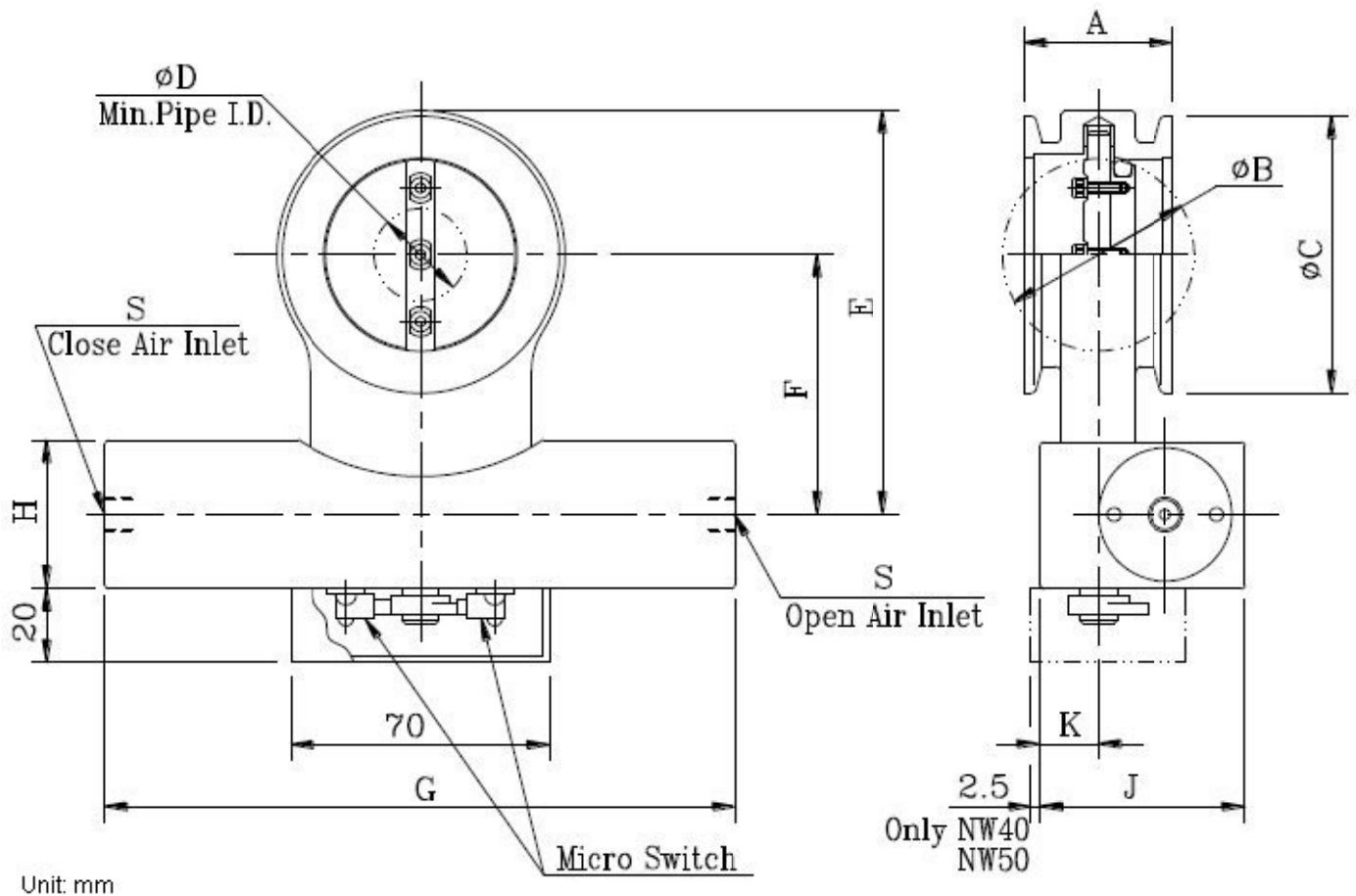


BV-JIS-AXO Series dimension drawing

Note 1: The below is the flange produced in accordance with JIS B 2290 Vacuum Flange.

※ The change of the specification due to product improvement will not be informed in advance.

Type	BV-1AXO	BV-2AXO	BV-2.5AXO	BV-3AXO	BV-4AXO	BV-6AXO	BV-8AXO	BV-10AXO	BV-14AXO	BV-16AXO
Commodity Code	10905□□	10907□□	10908□□	10909□□	10910□□	10911□□	10912□□	10913□□	10915□□	10916□□
A	20	20	20	20	20	26	40	40	50	65
B	34	52	65	80	102	155	208	257	355	391
C	58	88	105	120	145	190	250	302	402	458
D	90	120	145	160	185	235	300	350	450	520
n—E	4-φ10	4-φ10	4-φ12	4-φ12	8-φ12	8-φ12	8-φ15	12-φ15	12-φ15	12-φ19
F	70	100	120	135	160	210	270	320	420	480
G	32	51	64	79	101	154	206	253	354	391
H	100	130	155	170	195	245	315	375	465	545
J	55	70	83	90	103	128	165	200	240	285
K	40	70	85	100	120	175	225	275	380	430
L	170	170	200	200	200	270	350	380	584	584
M	5	5	5	5	5	5	8	8	8	8
N	40	40	47	47	47	70	93	105	136	136
P	V40	V70	V85	V100	V120	V175	V225	V275	V380	V430
Q	56	56	61	61	61	79	108	123	185	185
R	18	18	20	20	20	22	23	23	37	37
S	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4

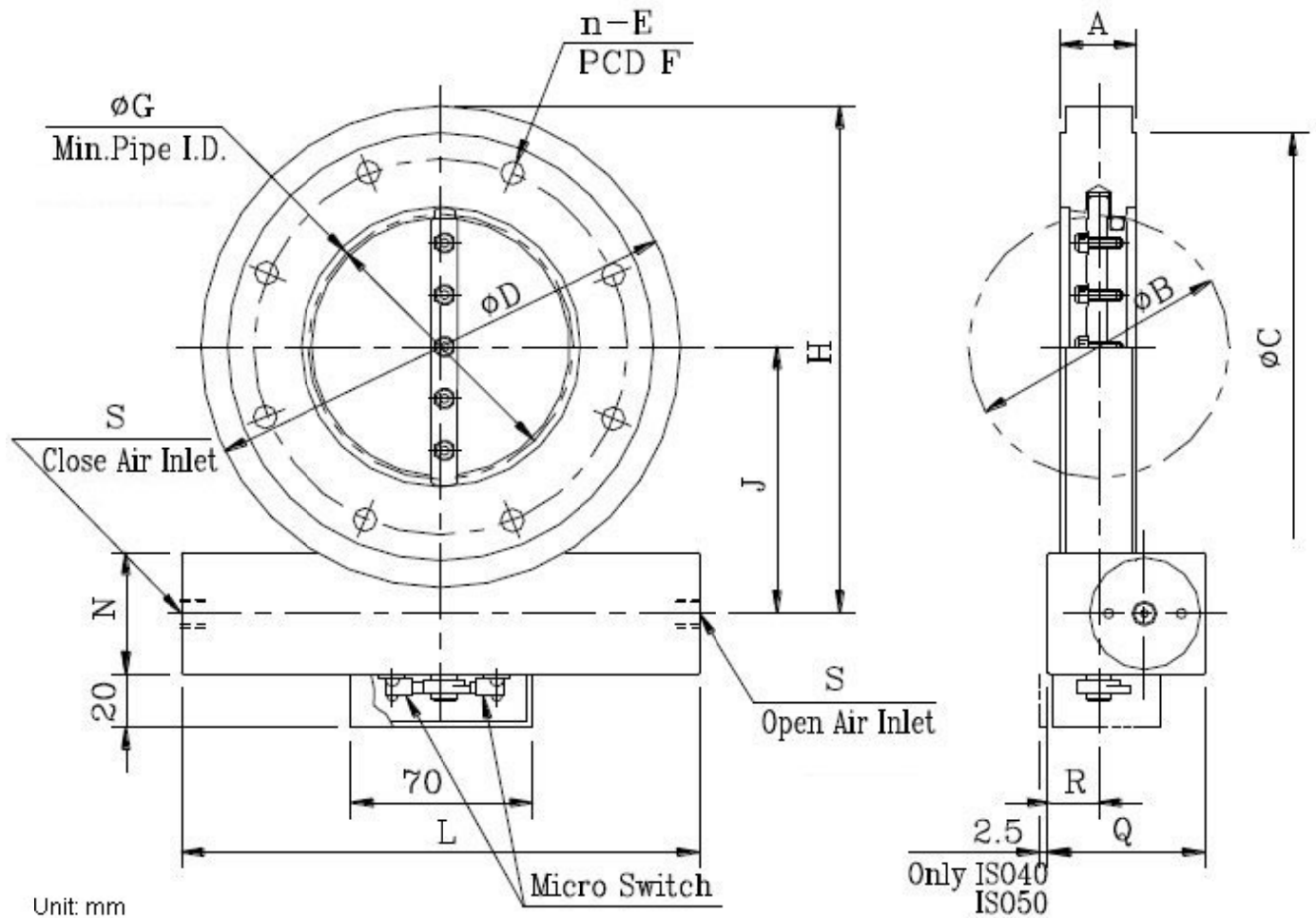


BV-NW-AXO Series dimension drawing

Note 1: Please use the multifunctional tongs of the company (Multi-Clump made by Fuji Technology) during installation. If other pliers beyond the company are used, installation may not be performed due to the shape of the pliers.

※ The change of the specification due to product improvement will not be informed in advance.

Type	BV-NW40AXO	BV-NW50AXO	BV-NW63AXO	BV-NW80AXO	BV-NW100AXO	BV-NW160AXO
Commodity Code	10924□□	10925□□	10926□□	10927□□	10928□□	10930□□
A	40	40	40	60	60	66
B	34	52	65	80	102	155
C	55	75	87	114	134	190
D	0	25	56	44	78	143
E	85	109	129	150	176	224.5
F	55	70	83	90	103	127.5
G	170	170	200	200	200	270
H	40	40	47	47	47	70
J	56	56	61	61	61	79
K	18	18	19.5	20	20	22
S	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rc1/4

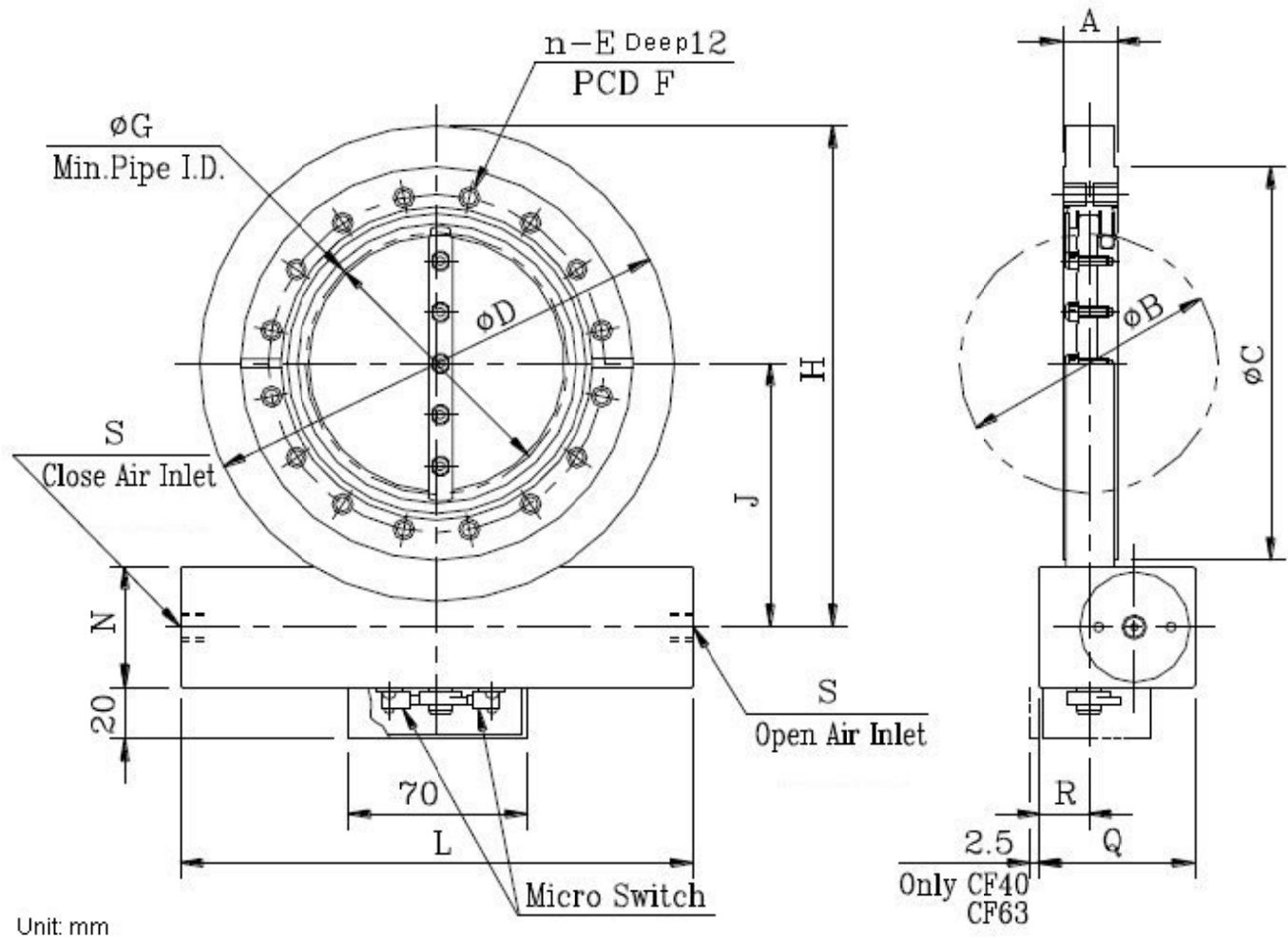


BV-ISO-AXO Series dimension drawing

Note 1: The below is the flange produced in accordance with ISO 1609.

※ The change of the specification due to product improvement will not be informed in advance.

Type	BV-ISO40AXO	BV-ISO50AXO	BV-ISO63AXO	BV-ISO80AXO	BV-ISO100AXO	BV-ISO160AXO	BV-ISO200AXO	BV-ISO250AXO
Commodity Code	10965□□	10966□□	10967□□	10967□□	10968□□	10970□□	10971□□	10972□□
A	30	30	30	30	30	50	50	50
B	34	52	65	80	102	155	208	257
C	100	110	130	145	165	225	285	335
D	120	120	145	160	185	235	300	350
n—E	4-φ7	4-φ9	4-φ9	8-φ9	8-φ9	8-φ11	12-φ11	12-φ11
F	80	90	110	125	145	200	260	310
G	20	45	59	74	97	144	199	249
H	130	130	155	170	195	245	315	375
J	70	70	83	90	103	128	165	200
L	170	170	200	200	200	270	350	380
N	40	40	47	47	47	70	93	105
Q	56	56	61	61	61	79	108	123
R	18	18	20	20	20	22	23	23
S	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rc1/4	Rc1/4	Rc1/4



BV-CF-AXO Series dimension drawing

Note 1: The below is the bakeable vacuum flange produced in accordance with ISO 3669.

Note 2: CF40 without leakage groove

※ The change of the specification due to product improvement will not be informed in advance.

Type	BV-CF40AXO	BV-CF63AXO	BV-CF100AXO	BV-CF160AXO	BV-CF200AXO	BV-CF250AXO
Commodity Code	10940□□	10942□□	10944□□	10945□□	10947□□	10948□□
A	30	30	30	50	50	50
B	34	52	102	155	208	257
C	69.4	113.5	151.6	202.4	253.2	305.0
D	90	120	185	235	300	350
n-E	6-M6	8-M8	16-M8	20-M8	24-M8	32-M8
F	58.7	92.1	130.2	181	231.8	284
G	20	45	97	144	199	249
H	100	130	195	245	315	375
J	55	70	103	128	165	200
L	170	170	200	270	350	380
N	40	40	47	70	93	105
Q	56	56	61	79	93	105
R	18	18	20	22	23	23
S	Rp1/8	Rp1/8	Rp1/8	Rc1/4	Rc1/4	Rc1/4

Manual slot butterfly valve and manual draw bar butterfly valve AX series

More excellent cost performance

Conductance advantage

The butterfly valve is straight tubing, and its distance between flange faces is ultrathin because of our compact design. Compared with the valve with the same caliber, the butterfly valve used in all vacuum devices has the characteristic that the installed tubing width is thinnest.

The thinnest of the distance between flange faces can allow the opening conductance value to be maximal, and high-efficiency exhaust can be performed.

Manual slot butterfly valve (SBVM)

◇ Worm and worm wheel are adopted, the conductance can be changed at will by manually rotating the slot butterfly valve, and manual exhaust flow throttling valve operation is facilitated. The valve is convenient to operate, and is a fully opened and fully closed simple and convenient valve as a manual valve with excellent repeatability.

◇ It is a device capable of keeping the pressure of the vacuum chamber to a certain extent. It is optimal if exhaust can be controlled in the main exhaust pipe. The small-caliber bypass tubing shall be used for control or a conductance valve shall be additionally mounted on the exhaust pipeline, and only the butterfly valve that the valve opening can be manually fixed in any position and the conductance can be adjusted can exert its characteristic.

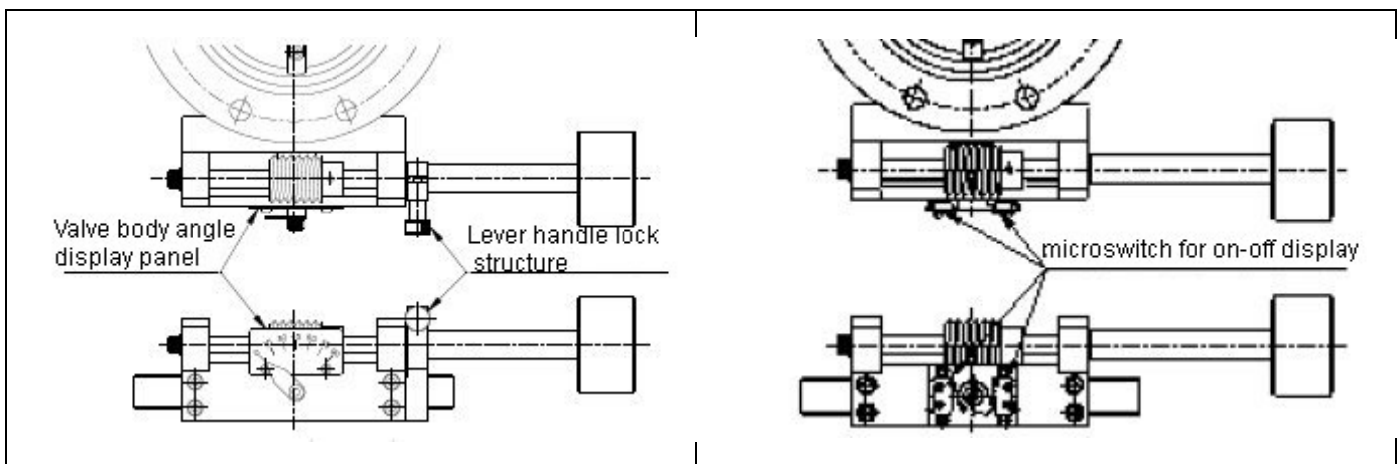
Manual lever handle lock butterfly valve (BVM)

The valve can be turned on and off by rotating the lever handle lock directly connected with the valve body for 90°, and is a convenient-to-operate valve body due to its one-touch characteristic.

Main specifications

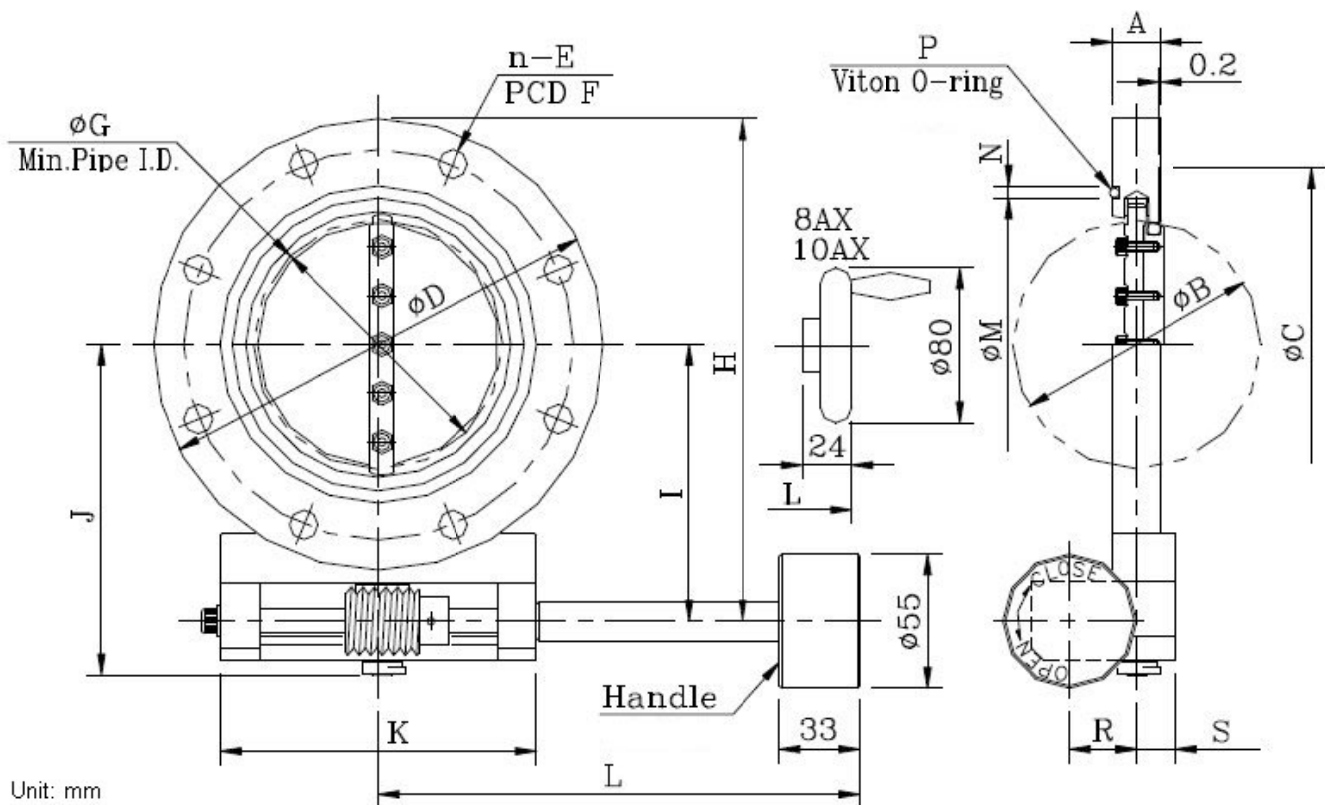
Flange type	JIS · NW · ISO · CF(SBVM)	Port Diameter	25A~250A (SBVM)
	JIS · NW (BVM)		25A~150A(BVM)
Leakage rate	1×10^{-9} Pam ³ /s or less	Wetted parts material	SUS304
Pressure range	$10^5 \sim 10^{-5}$ Pa	Appendix	Opening and closing mechanism with indicator
Disc sealing	Viton O-ring	Option	Micro switch
Shaft sealing	Viton O-ring two-stage		Angle display panel Lever handle lock

- ※ SBVM can confirm the valve body opening. The angle display panel (attached with angle dial) and the lock structure in the middle of the valve body can be fixed and installed as an option (Figure 1 , be ordered separately)
- ※ The microswitch for on-off display can be installed in accordance as an option. (Figure 2 , be ordered separately)
- ※ The change of the specification due to product improvement will not be informed in advance.
- ※ The products in special specification can be manufactured, so please contact us if necessary.



(Figure 1)

(Figure 2)

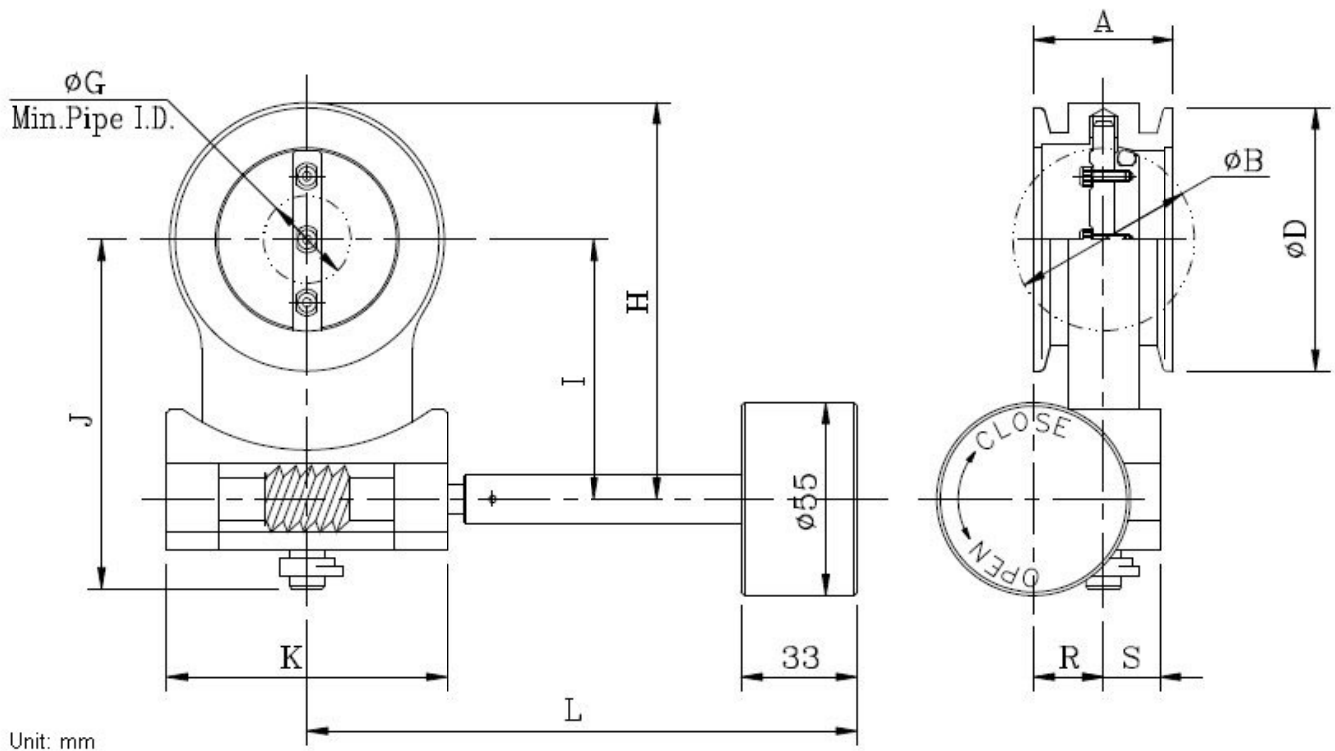


SBVM-JIS-AX Series dimension drawing

Note 1: The below is the flange produced in accordance with JIS B 2290 Vacuum Flange.

※ The change of the specification due to product improvement will not be informed in advance.

Type	SBVM-1AX	SBVM-2AX	SBVM-2.5AX	SBVM-3AX	SBVM-4AX	SBVM-6AX	SBVM-8AX	SBVM-10AX
Commodity Code	10605□□	10607□□	10608□□	10609□□	10610□□	10611□□	10612□□	10613□□
A	20	20	20	20	20	26	40	40
B	34	52	65	80	102	155	208	257
C	58	88	105	120	145	190	250	302
D	90	120	145	160	185	235	300	350
n—E	4-φ10	4-φ10	4-φ12	4-φ12	8-φ12	8-φ12	8-φ15	12-φ15
F	70	100	120	135	160	210	270	320
G	32	51	64	79	101	154	206	253
H	104	134	159	181	206	256	326	376
I	59	74	86.5	101	113.5	138.5	176	201
J	85	100	112	124	136	172	222	263
K	80	80	95	90	130	150	144	144
L	157	157	157	178	198	235	294	294
M	40	70	85	100	120	175	225	275
N	5	5	5	5	5	5	8	8
P	V40	V70	V85	V100	V120	V175	V225	V275
R	20	20	20	27.5	27.5	35	35	35
S	16	16	16	16	16	20	25	25

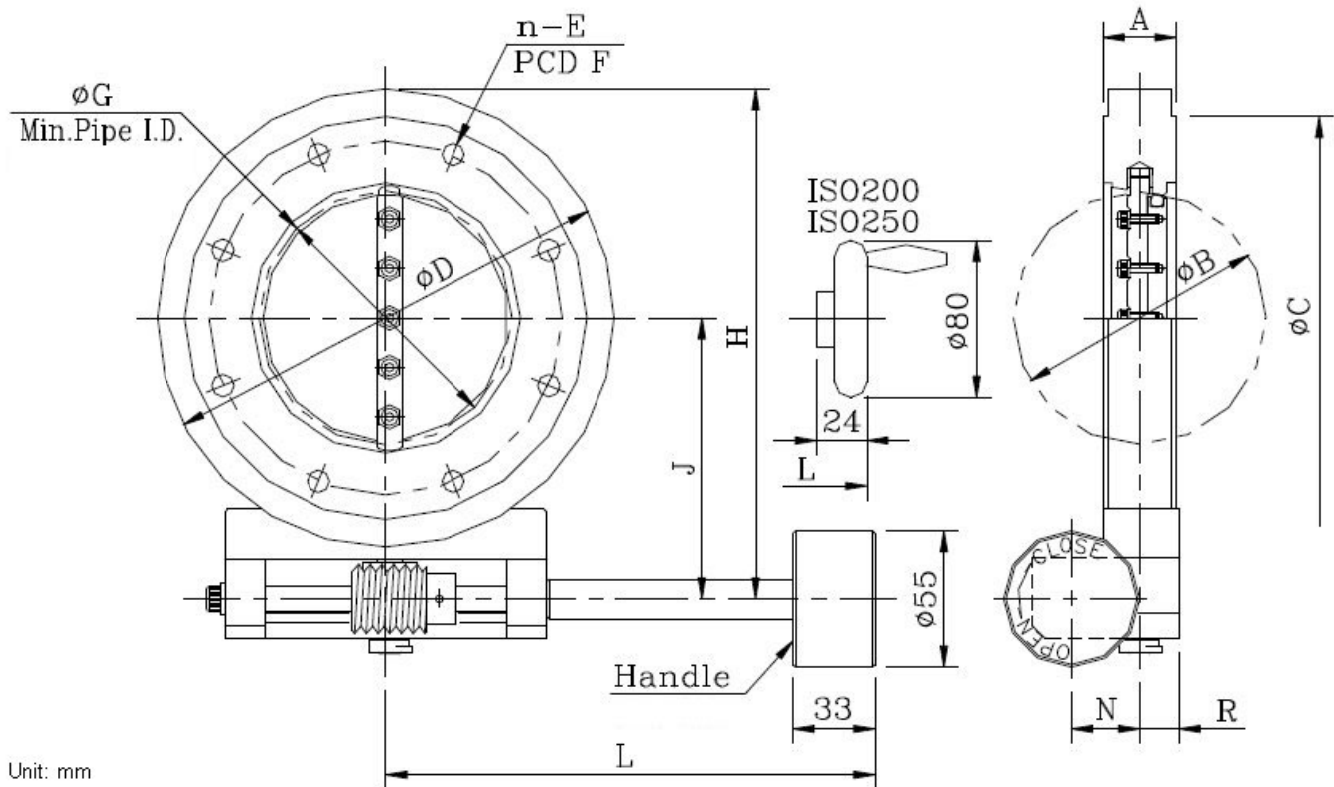


SBVM-NW-AX Series dimension drawing

Note 1: Please use the multifunctional tongs of the company during installation. If other pliers beyond the company are used, installation may not be performed due to the shape of the pliers.

※ The change of the specification due to product improvement will not be informed in advance.

Type	SBVM-NW40AX	SBVM-NW50AX	SBVM-NW63AX	SBVM-NW80AX	SBVM-NW100AX
Commodity Code	10624□□	10625□□	10626□□	10627□□	10628□□
A	40	40	40	60	60
B	34	52	65	80	102
D	55	75	87	114	134
G	0	25	56	44	78
H	89	113	132.5	161	186.5
I	59	74	86.5	101	113.5
J	85	100	112	124	136
K	80	80	95	90	130
L	157	157	157	178	198
R	20	20	20	27.5	27.5
S	16	16	16	16	16

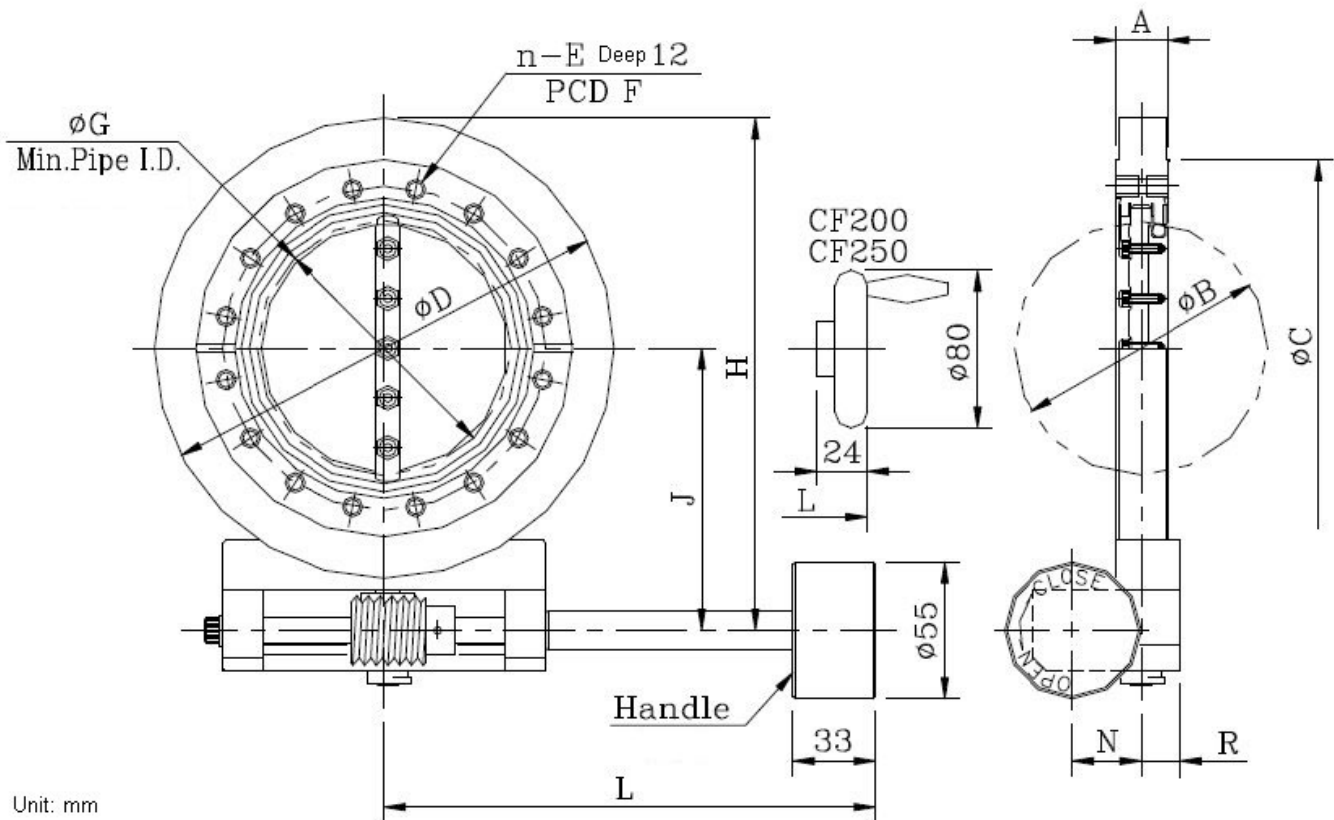


SBVM-ISO-AX Series dimension drawing

Note 1: The below is the flange produced in accordance with ISO 1609.

※ The change of the specification due to product improvement will not be informed in advance.

Type	BV-ISO40AXO	BV-ISO50AXO	BV-ISO63AXO	BV-ISO80AXO	BV-ISO100AXO	BV-ISO160AXO	BV-ISO200AXO	BV-ISO250AXO
Commodity Code	10965□□	10966□□	10967□□	10967□□	10968□□	10970□□	10971□□	10972□□
A	30	30	30	30	30	50	50	50
B	34	52	65	80	102	155	208	257
C	100	110	130	145	165	225	285	335
D	120	120	145	160	185	235	300	350
n—E	4-φ7	4-φ9	4-φ9	8-φ9	8-φ9	8-φ11	12-φ11	12-φ11
F	80	90	110	125	145	200	260	310
G	20	45	59	74	97	144	199	249
H	130	130	155	170	195	245	315	375
J	70	70	83	90	103	128	165	200
L	170	170	200	200	200	270	350	380
N	40	40	47	47	47	70	93	105
Q	56	56	61	61	61	79	108	123
R	18	18	20	20	20	22	23	23
S	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rp1/8	Rc1/4	Rc1/4	Rc1/4



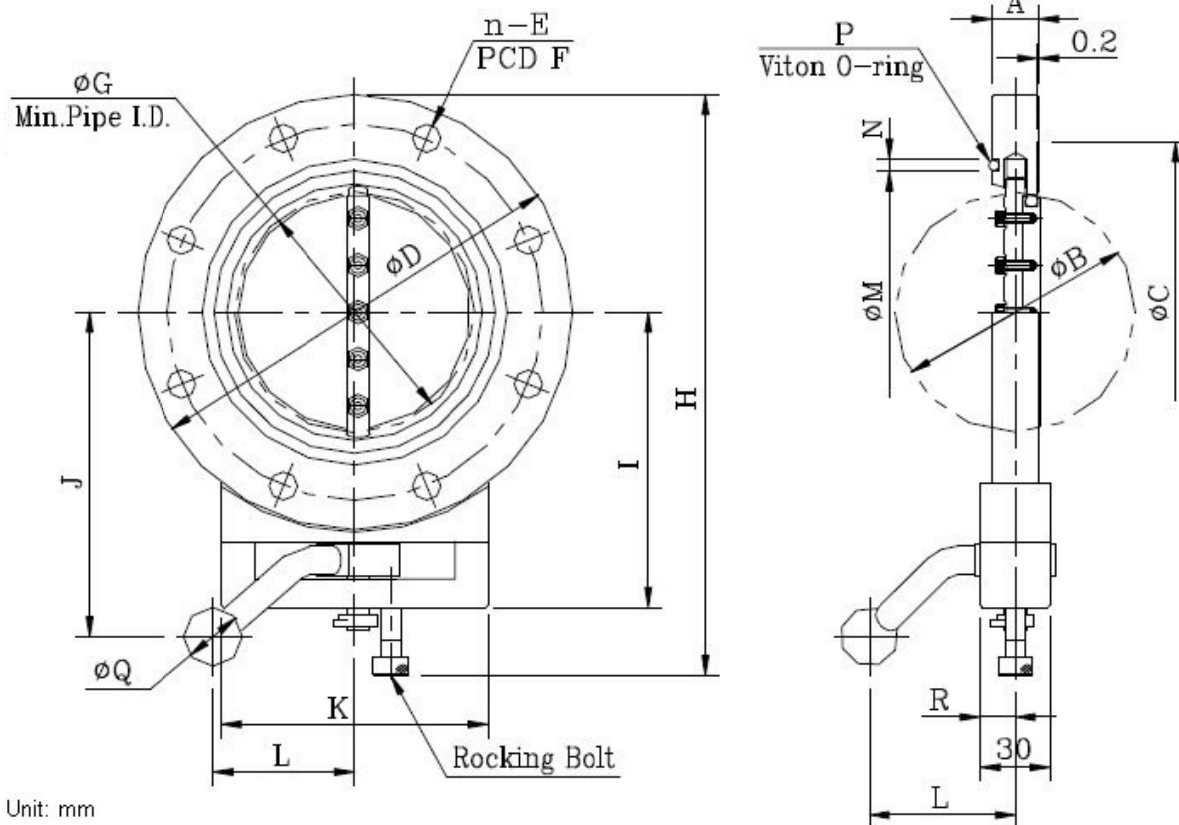
SBVM-CF-AX Series dimension drawing

Note 1: The below is the bakeable vacuum flange produced in accordance with ISO 3669.

Note 2: CF40 without leakage groove

※ The change of the specification due to product improvement will not be informed in advance.

Type	SBVM-CF40AX	SBVM-CF63AX	SBVM-CF100AX	SBVM-CF160AX	SBVM-CF200AX	SBVM-CF250AX
Commodity Code	10640□□	10642□□	10644□□	10645□□	10647□□	10648□□
A	30	30	30	50	50	50
B	34	52	102	155	208	257
C	69.4	113.5	151.6	202.4	253.2	305.0
D	90	120	185	235	300	350
n-E	6-M6	8-M8	16-M8	20-M8	24-M8	32-M8
F	58.7	92.1	130.2	181	231.8	284
G	20	45	97	144	199	249
H	104	134	206	256	326	376
J	59	74	113.5	138.5	176	201
L	157	157	198	235	294	294
N	20	20	27.5	35	35	35
R	16	16	16	20	25	25

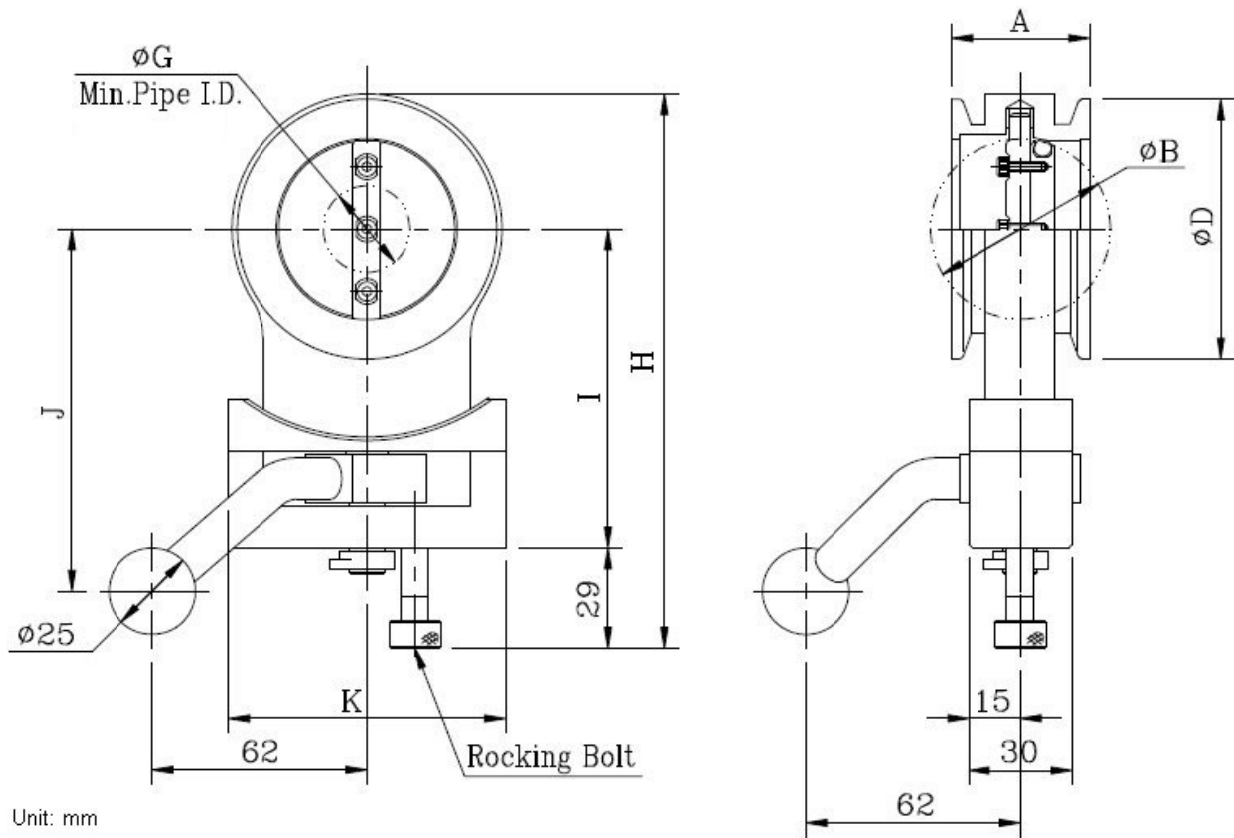


BVM-JIS-AX Series dimension drawing

Note 1: The below is the flange produced in accordance with JISB 2290 Vacuum Flange.

※ The change of the specification due to product improvement will not be informed in advance.

Type	BVM-1AX	BVM-2AX	BVM-2.5AX	BVM-3AX	BVM-4AX	BVM-6AX
Commodity Code	10405□□	10407□□	10408□□	10409□□	10410□□	10411□□
A	20	20	20	20	20	26
B	34	52	65	80	102	155
C	58	88	105	120	145	190
D	90	120	145	160	185	235
n-E	4-φ10	4-φ10	4-φ12	4-φ12	8-φ12	8-φ12
F	70	100	120	135	160	210
G	32	51	64	79	101	154
H	151	181	206	222	247	293
I	77	92	104.5	113	125.5	154.5
J	90	105	117.5	125	138	197
K	80	80	85	88	114	145
L	62	62	62	62	62	115
M	40	70	85	100	120	175
N	5	5	5	5	5	5
P	V40	V70	V85	V100	V120	V175
Q	25	25	25	25	25	30
R	15	15	15	15	15	14



BVM-NW-AX Series dimension drawing

Note 1: Please use the multifunctional tongs of the company during installation. If other pliers beyond the company are used, installation may not be performed due to the shape of the pliers.

※ The change of the specification due to product improvement will not be informed in advance.

Type	BVM-NW40AX	BVM-NW50AX	BVM-NW63AX	BVM-NW80AX	BVM-NW100AX
Commodity Code	10424□□	10425□□	10426□□	10427□□	10428□□
A	40	40	40	60	60
B	34	52	65	80	102
D	55	75	87	114	134
G	0	25	56	44	78
H	136	160	179.5	202	227.5
I	77	92	104.5	113	125.5
J	90	105	117	125	138
K	80	80	85	88	114