

V9BF Series Butterfly Valves and NOM-E Series Actuators

Overview

Honeywell V9BF series butterfly valves and NOM-E electric actuators, with modulating control or two-position control, can be applied to water supply and HVAC systems of commercial buildings, public buildings and city pipework. The modulating actuators work with a variety of control signals, i.e. 4–20 mA, 0–10 V or 2–10 V (on-site set-up available).



FEATURES

- Simple structure for easy operation and installation
- Soft valve seat for high performance sealing, high reliability and long service life
- Two-position control or analog control
- Manual operations available
- Position self-locking function and 3D position indicator
- Heaters to prevent condensation
- IP67 protection rating
- On-site on/off/stop control available

SPECIFICATIONS

Valve Body

- | | |
|----------------------|--|
| • Size | DN50-DN600 |
| • Nominal pressure | PN16 |
| • Medium | Cold/hot water |
| • Medium temperature | -10°C to 120°C |
| • Valve body | GGG40 |
| • Valve disc | Nylon coating GGG40 or stainless steel |
| • Valve stem | Stainless steel |
| • Valve seat | EPDM |
| • Pipe connection | ISO7005-2 |
| • Sealing pressure | 1.76 MPa |

ACTUATOR

Power	220 Vac+/-10%, 50/60 Hz
Run time	See the actuator information tables
Angle of rotation	90°±5°
Control (modulating control)	4–20 mA, DC 0–10 V or 2–10 V
Feedback (modulating control)	4–20 mA, DC 0–10 V or 2–10 V
Protection rating	IP67
Heater	See the actuator information tables
Overload protection	Built-in thermal protection (the actuator stops at 135±5°C and resets at 95±15°C)

<https://dlk.com.vn/>

Email: info@dlk.com.vn

V9BF Series Butterfly Valve

Features

Connection Design

Complies with requirement of international standard ISO 5211 for easy coupling with third party actuators.

Bearings

Self-lubricating bearings are installed at the top and bottom of the stem to prevent deadlock and reduce the torque.

Sealing Ring

Automatically adjusts the seal based on pressure changes to prevent leakage.

Valve Stem

Pinless connection of valve stem and disc to prevent leakage through the pin hole. DN50-DN250 is connected by a single shaft spline while DN350-DN600 is connected by dual-shaft splines. The valve stem and disc are tightly meshed to ensure the sealing of the valve, minimize drive delay and improve control accuracy.

Valve Disc

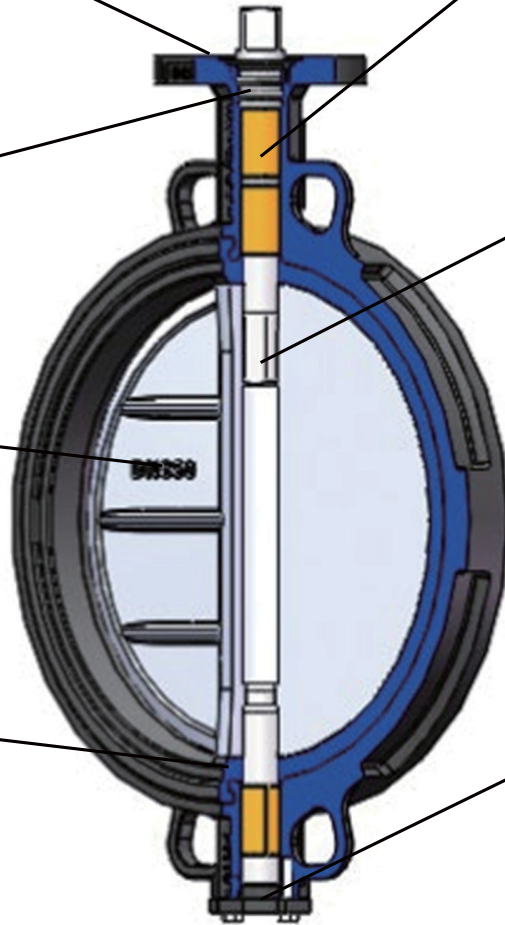
Reinforced strip on disc for increased strength. Nylon coating over disc to withstand corrosion, abrasion and high temperatures.

Valve Seat

Soft valve seat to eliminate leakage points. The valve seat is fitted into a groove on the valve body to prevent separation. The groove also prevents deformation due to frictional torque.

Thrust Bushing

The thrust bushing reduces friction caused by the weight of the valve disc and decreases the overall frictional torque on the valve. It also eliminates the risk of deadlock between the stem and the lower end of the valve body.



V9BF Series Butterfly Valves and Actuators

Model Designation

Butterfly Valve

V9	The new series		
BF	Butterfly Valve		
W	Connection: W — Wafer; F — Flanged ; L - Lug		
16	Rated pressure: PN16		
-050	Valve Size: DN50		
-2	Valve disc material: Blank - Nylon coating ductile iron -2 - Stainless Steel		

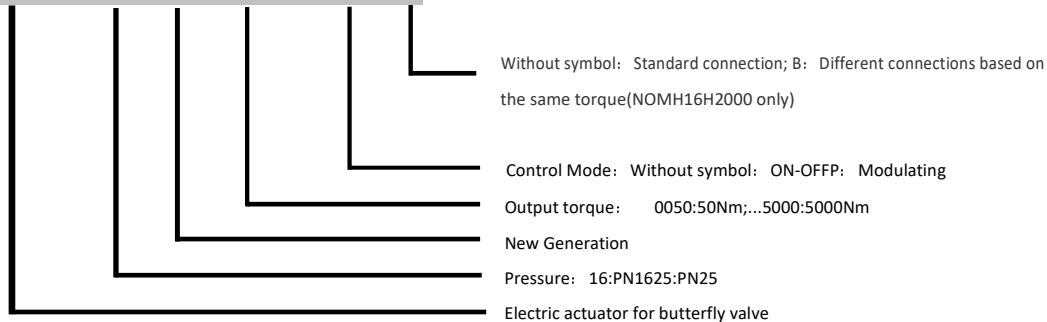
E.g.:

V9	BF	W	16	-	050
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Next-generation PN16 DN50 wafer type butterfly valve with nylon coating ductile iron disc

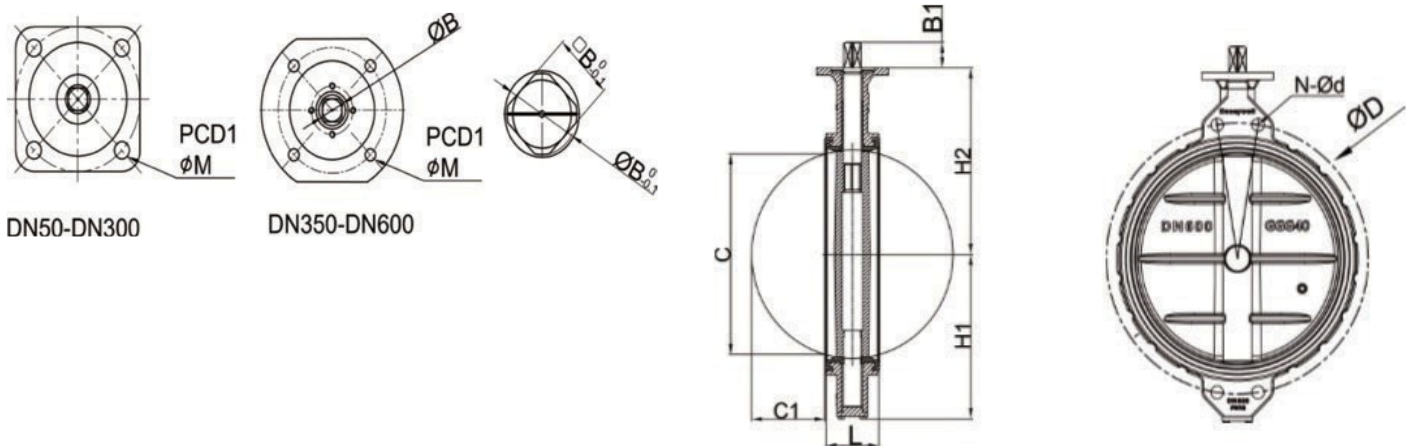
Actuator

NOM 16 H 0050 P B



V9BF Series Butterfly Valves and Actuators

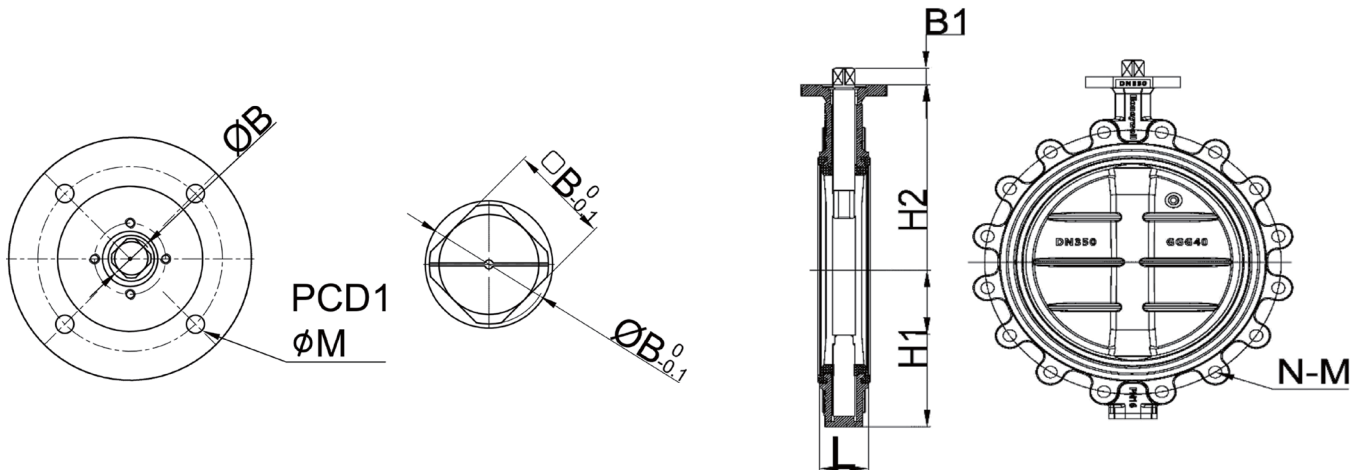
V9BFW wafer type



Model	Size	L	H1	H2	N-Ø d	Ø D	C	C1	Ø B	B1	□ B	Mounting flange (ISO 5211)		Weight (kg)	
												Type	PCD1 ØM		
V9BFW16-050(-2)	DN50	43	62	136	4-19	125	33	6	14	19	11	F07	70	10	3
V9BFW16-065(-2)	DN65	46	84	145	4-19	145	55	13	14	19	11	F07	70	10	3.5
V9BFW16-080(-2)	DN80	46	89	151	4-19	160	73	20	14	19	11	F07	70	10	4.5
V9BFW16-100(-2)	DN100	52	106	175	4-19	180	87	25	14	19	11	F07	70	10	6
V9BFW16-125(-2)	DN125	56	120	190	4-19	210	113	35	18	19	14	F07	70	10	7.2
V9BFW16-150(2)	DN150	56	131	203	4-23	240	141	48	18	19	14	F07	70	10	9.2
V9BFW16-200(-2)	DN200	60	164	246	4-23	295	192	71	24	24	17	F10	102	12	15
V9BFW16-250(-2)	DN250	68	200	271	4-28	355	242	91	30	24	22	F10	102	12	24
V9BFW16-300(-2)	DN300	78	235	296	4-28	410	291	112	30	24	22	F10	102	12	35
V9BFW16-350(-2)	DN350	78	280	368	4-28	470	294	112.2	35	29	27	F12	125	14	51
V9BFW16-400(-2)	DN400	102	315	400	4-31	525	326	128	38	29	27	F12	125	14	65
V9BFW16-450(-2)	DN450	114	345	422	4-31	585	380	144	45	38	36	F14	140	18	82
V9BFW16-500(-2)	DN500	127	373	480	4-34	650	429	162	45	38	36	F14	140	18	126
V9BFW16-600(-2)	DN600	154	450	562	4-37	770	481	182.4	55	48	36	F16	165	22	205

V9BF Series Butterfly Valves and Actuators

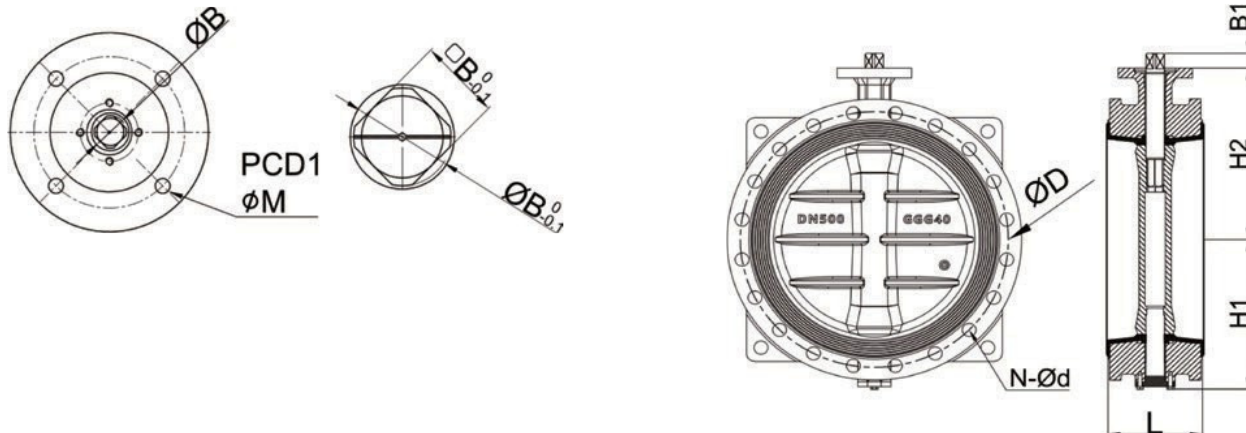
V9BFL Lug type



Model	Size	L	H1	H2	ØD	N-Ød	ØB	B1	□ B	Mounting flange (ISO 5211)			Weight (Kg)
										Type	PCD1	ØM	
V9BFL16-050(-2)	DN50	43	62	136	125	4- M16	14	19	11	F07	70	10	3.95
V9BFL16-065(-2)	DN65	46	84	145	145	4- M16	14	19	11	F07	70	10	4.5
V9BFL16-080(-2)	DN80	46	89	151	160	8- M16	14	19	11	F07	70	10	5.4
V9BFL16-100(-2)	DN100	52	106	175	180	8- M16	14	19	11	F07	70	10	7.2
V9BFL16-125(-2)	DN125	56	120	190	210	8- M16	18	19	14	F07	70	10	11
V9BFL16-150(-2)	DN150	56	131	203	240	8- M20	18	19	14	F07	70	10	12.5
V9BFL16-200(-2)	DN200	60	164	246	295	12- M20	24	24	17	F10	102	12	20
V9BFL16-250(-2)	DN250	68	200	271	355	12- M24	30	24	22	F10	102	12	29
V9BFL16-300(-2)	DN300	78	235	296	410	12- M24	30	24	22	F10	102	12	48
V9BFL16-350(-2)	DN350	78	280	368	470	16- M24	35	29	27	F12	125	14	61
V9BFL16-400(-2)	DN400	102	315	400	525	16- M27	38	29	27	F12	125	14	85
V9BFL16-450(-2)	DN450	114	345	422	585	20- M27	45	38	36	F14	140	18	130
V9BFL16-500(-2)	DN500	127	373	480	650	20- M30	45	38	36	F14	140	18	175
V9BFL16-600(-2)	DN600	154	449	508	770	20- M33	55	48	36	F16	165	22	264

V9BF Series Butterfly Valves and Actuators

V9BFF flanged butterfly valve



Model	Size	L	H1	H2	Ø D	N-ØD	Ø B	B1	□ B	Mountingflange (ISO 5211)			Weight (kg)
										Type	PCD1	ØM	
V9BFF16-050(-2)	DN50	108	80	110	125	4-19	14	19	11	F07	70	10	7.8
V9BFF16-065(-2)	DN65	112	89	134	145	4-19	14	19	11	F07	70	10	9.7
V9BFF16-080(-2)	DN80	114	100	131	160	8-19	14	19	11	F07	70	10	10.6
V9BFF16-100(-2)	DN100	127	114	150	180	8-19	14	19	11	F07	70	10	13.8
V9BFF16-125(-2)	DN125	140	127	170	210	8-19	18	19	14	F07	70	10	18.2
V9BFF16-150(-2)	DN150	140	143	180	240	8-23	18	19	14	F07	70	10	21.7
V9BFF16-200(-2)	DN200	152	175	210	295	12-23	24	24	17	F10	102	12	31.8
V9BFF16-250(-2)	DN250	165	203	245	355	12-28	30	24	22	F10	102	12	44.7
V9BFF16-300(-2)	DN300	178	242	276	410	12-28	30	24	22	F10	102	12	57.9
V9BFF16-350(-2)	DN350	190	269	328	470	16-28	35	29	27	F12	125	14	81.6
V9BFF16-400(-2)	DN400	216	310	376	525	16-31	38	29	27	F12	125	14	116
V9BFF16-450(-2)	DN450	222	335	407	585	20-31	45	38	36	F14	140	18	157
V9BFF16-500(-2)	DN500	229	362	433	650	20-34	45	38	36	F14	140	18	175
V9BFF16-600(-2)	DN600	267	449	508	770	20-37	55	48	36	F16	165	22	245

V9BFW(L) Series Butterfly Valves and Actuators (Shut-Off Pressure: 1.0 Mpa)
Order Information

Size	Valve items	Actuator items (ON-OFF)	Actuator items (Modulating)	Torque (Nm)	Running time (50Hz)	Motor Consumption (VA)	Heater (W)
DN50	V9BFW(L)16-050(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN65	V9BFW(L)16-065(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN80	V9BFW(L)16-080(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN100	V9BFW(L)16-100(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN125	V9BFW(L)16-125(-2)	NOM16H0080	NOM16H0080P	80	30	48	5
DN150	V9BFW(L)16-150(-2)	NOM16H0200	NOM16H0200P	200	30	92	5
DN200	V9BFW(L)16-200(-2)	NOM16H0200	NOM16H0200P	200	30	92	5
DN250	V9BFW(L)16-250(-2)	NOM16H0400	NOM16H0400P	400	30	136	5
DN300	V9BFW(L)16-300(-2)	NOM16H0400	NOM16H0400P	400	30	136	5
DN350	V9BFW(L)16-350(-2)	NOM16H0800	NOM16H0800P	800	35	220	5
DN400	V9BFW(L)16-400(-2)	NOM16H0800	NOM16H0800P	800	35	220	5
DN450	V9BFW(L)16-450(-2)	NOM16H2000	NOM16H2000P	2000	70	286	5
DN500	V9BFW(L)16-500(-2)	NOM16H2000	NOM16H2000P	2000	70	286	5
DN600	V9BFW(L)16-600(-2)	NOM16H2000B	NOM16H2000PB	2000	70	286	5

V9BFF Series Flanged Butterfly Valves and Actuators (Shut-Off Pressure: 1.0 Mpa)
Order Information

Size	Valve items	Actuator items (ON-OFF)	Actuator items (Modulating)	Torque (Nm)	Running time (50Hz)	Motor Consumption (VA)	Heater (W)
DN50	V9BFF16-050(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN65	V9BFF16-065(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN80	V9BFF16-080(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN100	V9BFF16-100(-2)	NOM16H0050	NOM16H0050P	50	20	48	5
DN125	V9BFF16-125(-2)	NOM16H0080	NOM16H0080P	80	30	48	5
DN150	V9BFF16-150(-2)	NOM16H0200	NOM16H0200P	200	30	92	5
DN200	V9BFF16-200(-2)	NOM16H0200	NOM16H0200P	200	30	92	5
DN250	V9BFF16-250(-2)	NOM16H0400	NOM16H0400P	400	30	136	5
DN300	V9BFF16-300(-2)	NOM16H0400	NOM16H0400P	400	30	136	5
DN350	V9BFF16-350(-2)	NOM16H0800	NOM16H0800P	800	35	220	5
DN400	V9BFF16-400(-2)	NOM16H1000	NOM16H1000P	1000	54	220	5
DN450	V9BFF16-450(-2)	NOM16H2000	NOM16H2000P	2000	70	286	5
DN500	V9BFF16-500(-2)	NOM16H2000	NOM16H2000P	2000	70	286	5
DN600	V9BFF16-600(-2)	NOM16H2000B	NOM16H2000PB	2000	70	286	5

Kv Values for V9BF Series Butterfly Valves

Size	Kv values for different openings								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
DN50	1.12	3.8	10.2	22.0	38.0	60.0	100.0	132.0	175.0
DN65	2.0	7.5	18.2	35.0	61.0	95.0	187.0	240.0	306.0
DN100	3.8	14.6	39.0	72.0	119.0	221.0	361.0	606.0	723.0

DN125	6.5	24.0	62.0	118.0	217.0	394.0	599.0	1038.0	1240.5
DN150	10.0	41.0	95.0	175.0	326.0	542.0	873.0	1260.0	1848.0
DN200	19.0	64.0	165.0	306.0	573.0	995.0	1567.0	2310.0	3117.0
DN250	28.0	101.0	245.0	450.0	836.0	1462.0	2253.0	3256.0	4540.0
DN300	34.0	129.0	312.0	615.0	1137.0	2125.0	3238.0	4991.0	6846.0
DN350	47.0	163.0	390.0	795.0	1498.0	2573.0	3980.0	6749.0	8520.0
DN400	62.0	231.0	508.0	1077.0	1973.0	3381.0	5385.0	8099.0	11458.0
DN450	65.0	256.0	621.0	1208.0	2315.0	3925.0	6331.0	9474.0	13542.0
DN500	133.0	346.0	1059.0	2693.0	4086.0	6348.0	9513.0	13109.0	18678.0
DN600	239.0	694.0	1153.0	2789.0	4966.0	7961.0	12985.0	19648.0	28017.0

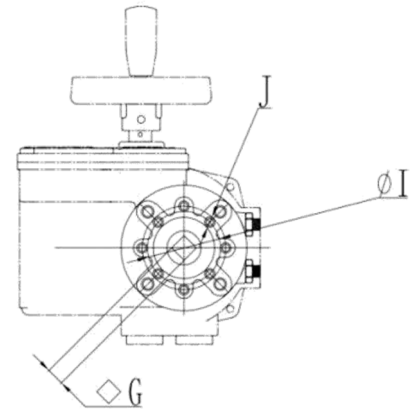
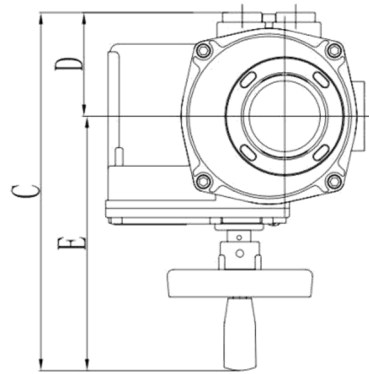
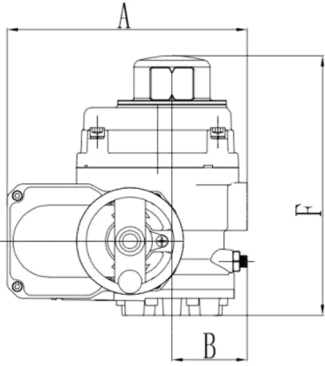
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Valves and Actuators

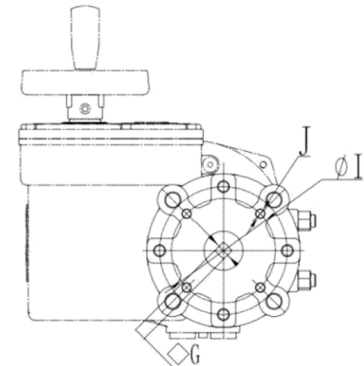
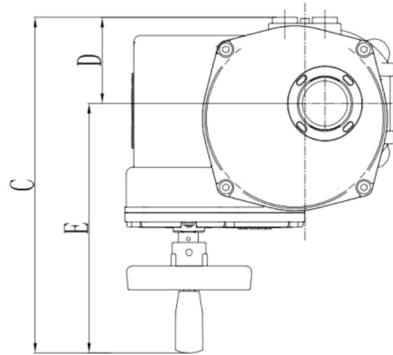
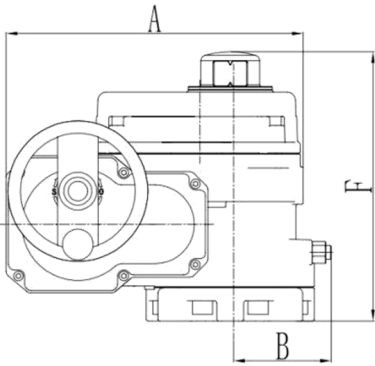
Actuator dimensions

ON-OFF Type

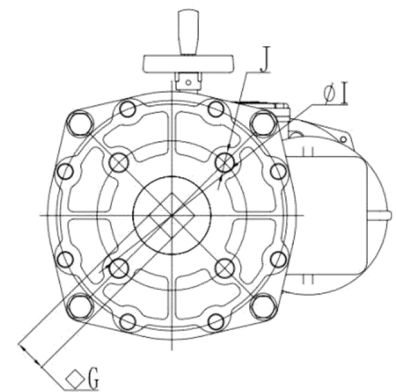
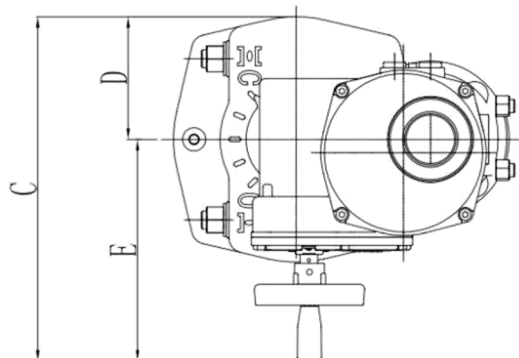
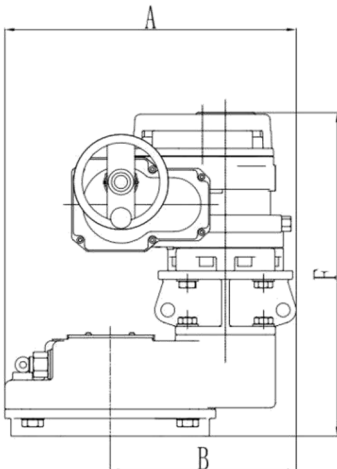
Notice: Multiple stem adaptors of NOM16H0200(P)/NOM16H0400(P) to meet the different sizes of butterfly valve.



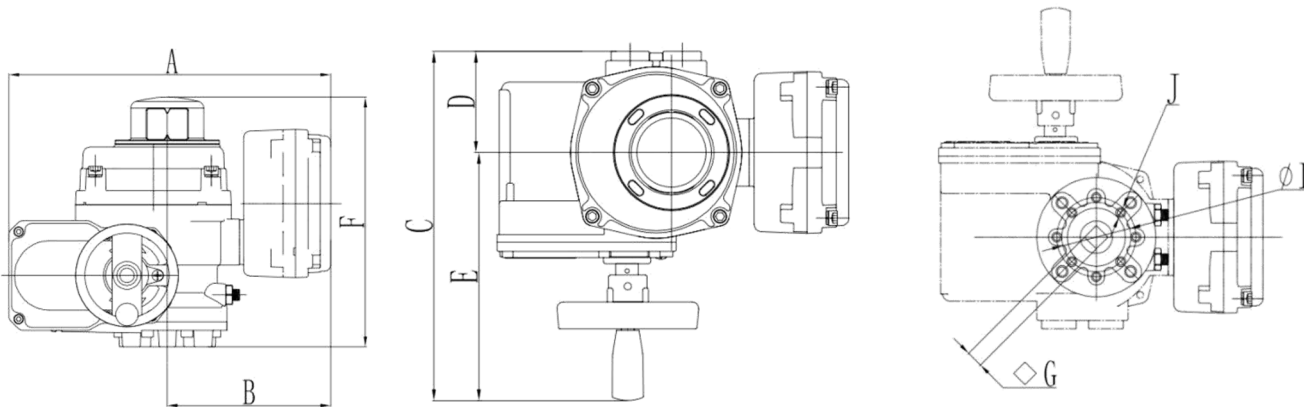
NOM16(25)H0050/NOM16(25)H0080



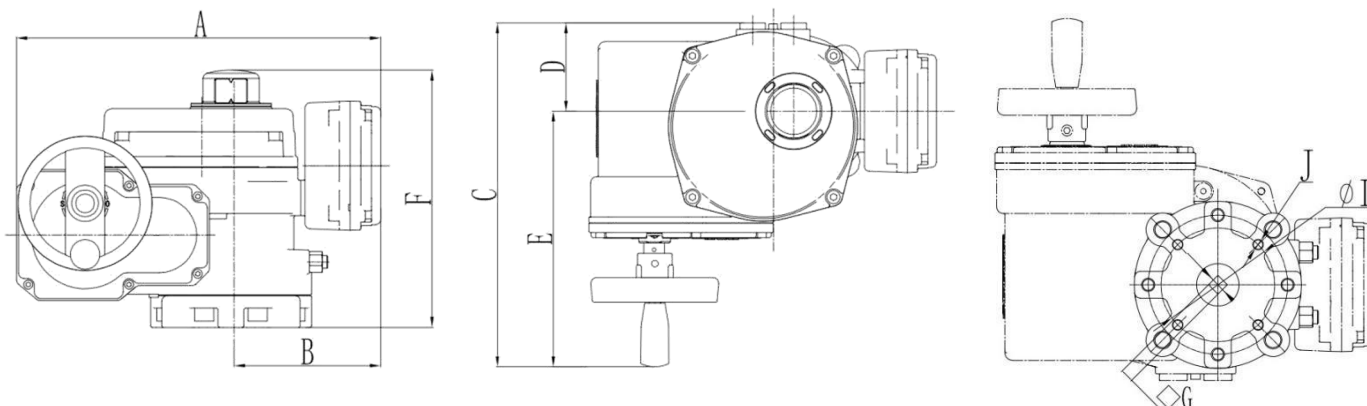
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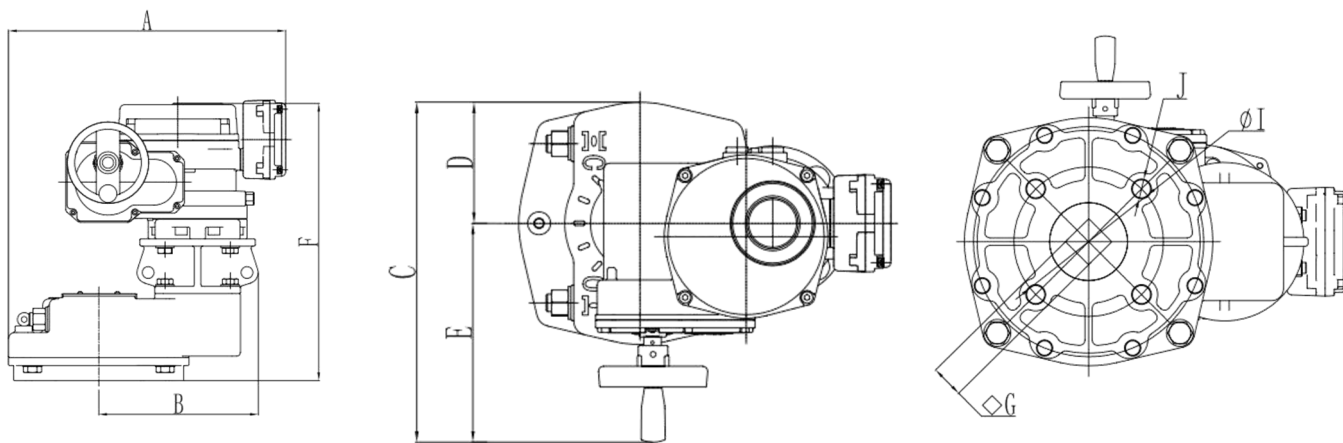
NOM16(25)H2000(B)/NOM16(25)H4000/NOM16(25)H5000



NOM16(25)H0050P/NOM16(25)H0080P



NOM16(25)H0200P/NOM16(25)H0400P/NOM16(25)H0600P/NOM16(25)H0800P/NOM16(25)H1000P

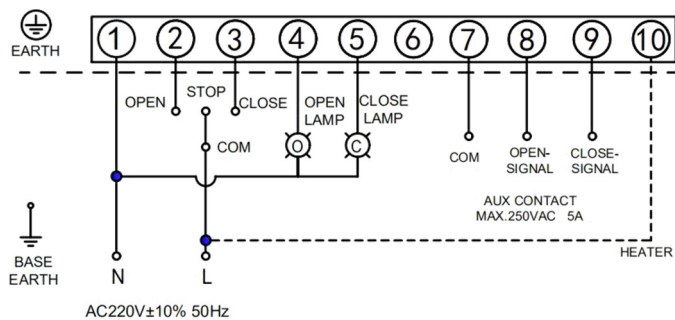


NOM16(25)H2000P(B)/NOM16(25)H4000P/NOM16(25)H5000P

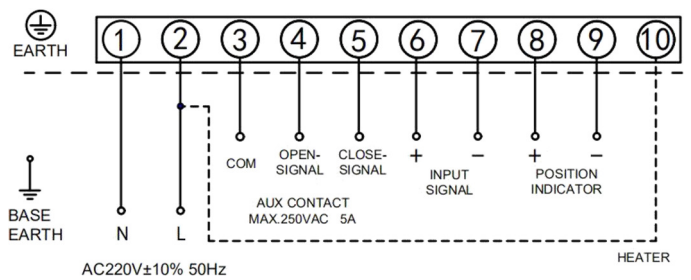
Actuator items	Dimension(mm)						Weight(Kg)
	A	B	C	D	E	F	
NOM16(25)H0050	166	52	236	66	170	180	3.3
NOM16(25)H0080	166	52	236	66	170	180	3.5
NOM16(25)H0200	243	84	342	82	260	214	10
NOM16(25)H0400	243	84	342	82	260	214	10.5
NOM16(25)H0600	243	84	342	82	260	214	11
NOM16(25)H0800	265	90	355	86	269	239	15.5
NOM16(25)H1000	265	90	355	86	269	239	16
NOM16(25)H2000(B)	380	241	406	137	269	420	52
NOM16(25)H4000	380	241	406	137	269	420	55
NOM16(25)H5000	380	241	406	137	269	420	57
NOM16(25)H0050P	234	121	236	66	170	180	4.5
NOM16(25)H0080P	234	121	236	66	170	180	4.7
NOM16(25)H0200P	303	132	342	82	260	214	11.2
NOM16(25)H0400P	303	132	342	82	260	214	11.7
NOM16(25)H0600P	303	132	342	82	260	214	12.2
NOM16(25)H0800P	343	143	355	86	269	239	16.7
NOM16(25)H1000P	343	143	355	86	269	239	17.2
NOM16(25)H2000P(B)	420	241	406	137	269	425	53.2
NOM16(25)H4000P	420	241	406	137	269	425	56.2
NOM16(25)H5000P	420	241	406	137	269	425	58.2

Wiring Drawing

ON-OFF Type



Modulating Type



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