





# Important Notices & Maintenance

- Make sure if the voltage is correct before wiring.
- Power off before distribution or for maintenance purpose.
- Lock tight the casting and conduit entrance after power distribution to prevent from dusting or water spoiling.
- The angle of electric actuators must not be below the horizon or stands upside down.
- Avoid the zone of gas or any chemical agent that might be explosive.
- When electric actuators need two sets of unit for simultaneously, please connect with the individual cable.
- Don't install in the complete vacuum space directly.
- The warranty period of our products is one year.
- Actuators should be placed at clean and dry place for storage, and protected with outer carton from being affected by great temperature difference or serious vibration.

Model No.	Power (Watts)	Max Torque (Nm)	Speed (Sec/ 90°)	Weight (kg)	Manual Override	Mounting Flange (ISO 5211)
BM-2	40W	120	8	6	N/A	F07
OM-A	10W	50	20	3	N/A	F05 or F07
OM-A-M	10W	50	20	3	Lever	F05/F07
OM-1	10W	35	12	2	Lever	F03/F05
OM-2	40W	90	15	11	Hand-wheel	F07
OM-3	40W	150	22	11	Hand-wheel	F07
OM-4	120W	400	16	20	Hand-wheel	F10
OM-5	120W	500	22	20	Hand-wheel	F10
OM-6	120W	650	28	20	Hand-wheel	F10
OM-7	180W	1000	46	32	Hand-wheel	F12 or F14
OM-8	220W	1500	46	32	Hand-wheel	F12 or F14
OM-9	180W	2000	58	60	Hand-wheel	F16
OM-10	220W	2500	58	60	Hand-wheel	F16
OM-11	250W	3000	58	61	Hand-wheel	F16
OM-12	300W	3500	58	61	Hand-wheel	F16
OM-13	300W	4500	80	81	Hand-wheel	F25



## Features

#### **Enclosure:**

- IP 67: Waterproof and dust-proof enclosures.
- NEMA 4X: Waterproof and dust-proof enclosures.
- Material: Dry powder coating aluminum alloy.

#### Motor:

- Standard extended duty cycle induction motor. F insulation class for all models. (OM-A, OM-A-M, BM-2, and OM-1 to OM-13.)
- Built-in thermal protection (135°C) prevents motor burning out.

## **Position Indicator:**

• All models have continuous mechanism position indicator on the top of actuator cover.

#### **Manual Override:**

- Non-clutch design, the manual operation can be operated without any lever, clutch or brake upon power outage.
- When electric motor is operating, manual hand-wheel won't rotate for person safe purpose.

### Gear Train:

- High alloy steel gear trains provide self-locking function to avoid valve back drive.
- Gear trains have been already lubricated sufficiently with anti-high temperature lubricant at the factory.

### **Working Conditions:**

- Ambient temperature: -30 $^{\circ}$ C  $\sim$  +65 $^{\circ}$ C.
- The humidity: 30% ~ 95%.

#### **Various Options:**

- Space heater.
- Additional limit switches (2 units).
- Potentiometer unit (1K Ohm or 5K Ohm).
- Local control unit (local/remote, on/off).
- Conduit entrance (1/2" PS, 3/4" PF, 1/2" NPT).
- Torque switches (2 units).
- Current position transmitter (output 4-20mA).
- Modulating controller.
- Various voltages.
- Nylon enclosure material.
- Thermostat.

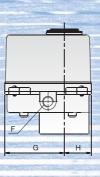
### Certificates:

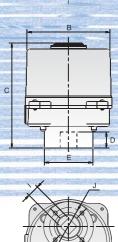
- •ISO 9001
- CE
- CSA (Conforming to the test standard of outdoor usage.)
- RoHs Compliance

# **Dimensions**







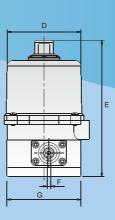


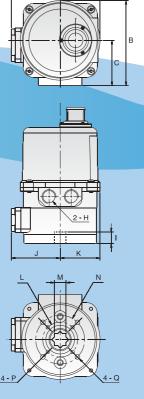
- Plastic cover.
- •No manual overide.
- •No mechanical stops.
- No certificates.

Unit:mm
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Dimension Model No.	А	В	С	D	Е	F	G	Н	 Max	J	К	Flange Type
BM-2	161	Ø154	195	30	Ø90	1/2 PS	110	50	22	Ø70	M8*1.25	F07



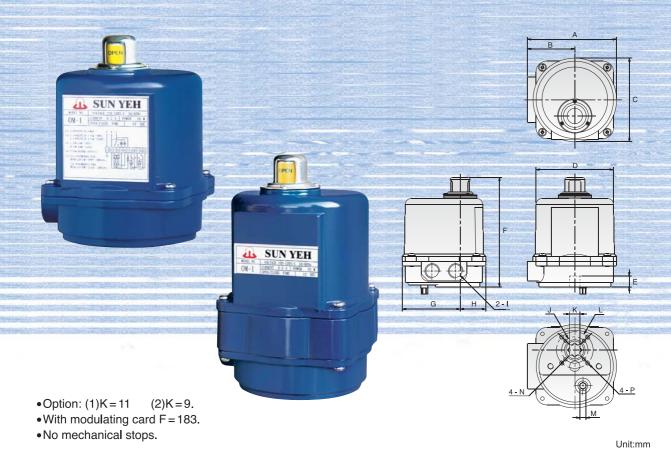




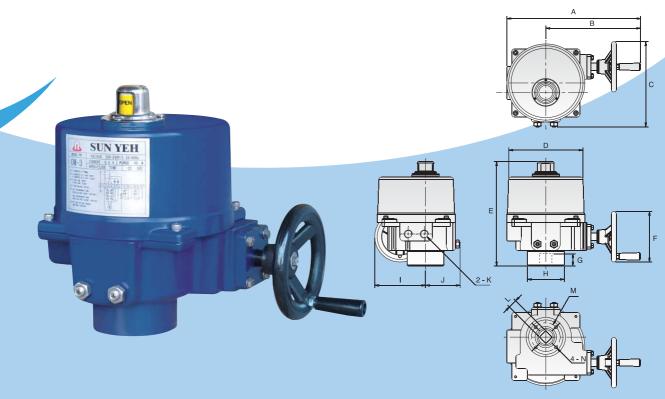
- •With modulating card E=229.
- •No mechanical stops.

Unit:mm

Dimension Model No.	А	В	С	D	Е	F	G	Н	I	J	K	L	M	N	Р	Q	Flange Type
OM-A	114	122	65	Ø106	196		Ø106	1/2 PS	17	57	57	Ø50	17	Ø70	M6*1.0	M8*1.25	F05 or F07
OM-A-M	127	122	65	Ø106	196	5	Ø102	1/2 PS	17	70	57	Ø50	17	Ø70	M6*1.0	M8*1.25	F05 / F07



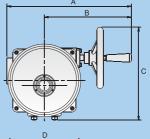
Dimension Model No.	А	В	С	D	Е	F	G	Н	I	J	K Max	L	M	N	Р	Flange Type
OM-1	122	65	114	Ø106	15	150	79	35	1/2 PS	Ø36	14	Ø50	8	M5*0.8	M6*10	F03/F05



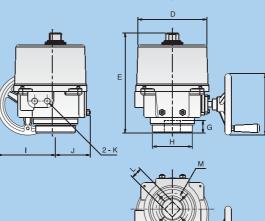
- •With DC motor E=289. (apply to DC model or 75% duty cycle)
- •Note: with torque switch A = 361.

															Unit:mm
Dimension Model No.	Α	В	С	D	E	F	G	Н	I	J	К	L Max	М	N	Flange Type
OM-2~OM-3	326	231	208	Ø181	255	Ø123	30	Ø90	124	84	1/2 PS	22	Ø70	M8*1.25	F07

## **Dimensions**



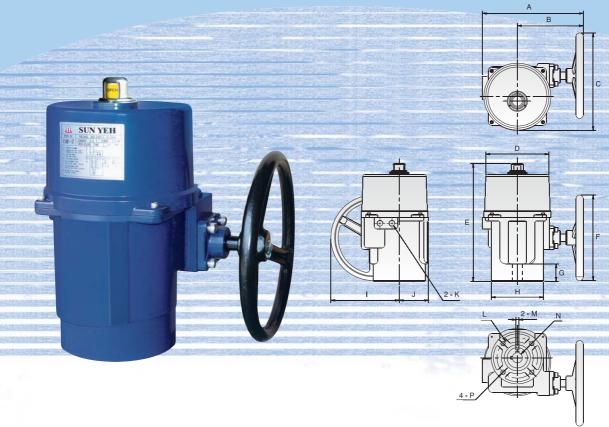




•Note: with torque switch A = 460.

Unit:mm

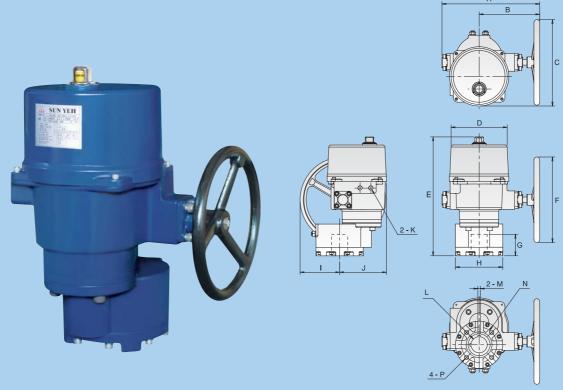
Dimension Model No.	А	В	С	D	E	F	G	Н	I	J	К	L	М	Ν	Flange Type
OM-4~OM-6	394	275	294	Ø217	317	Ø194	40	Ø125	184	110	1/2 PS	35	Ø102	M10*1.5	F10



• Note: with torque switch A = 435.

Unit:mm

Dimension Model No.	А	В	С	D	Е	F	G	Н	I	J	K	L	М	N Max	Р	Flange Type
OM-7~OM-8	347	227	336	Ø217	406	Ø295	60	Ø180	235	101	1/2 PS	Ø125	10	Ø35	M12*1.75	F12
OM-7~OM-8	347	227	336	Ø217	406	Ø295	60	Ø180	235	101	1/2 PS	Ø140	10	Ø35	M16*2.0	F14



Unit:mm

Dimension Model No.	Α	В	С	D	Е	F	G	н	I	J	K	L	M	N	Р	Flange Type
OM-9~OM-12	455	282	402	Ø261	554	Ø398	100	Ø220	184	218	1/2 PS	Ø75	12	Ø165	M20*2.5	F16



Unit:mm

Dimension Model No.		В	С	D	E	F	G	Н	ı	J	K	L	М	N	P ISO 5211	Q	Flange Type
OM-13	462	282	500	Ø261	571	Ø398	110	Ø360	217	283	1/2 PS	Ø72	20*12	Ø254	22.5°	M16*2.0	F25

# Option Items

## **VARIOUS VALVES**











#### **TORQUE SWITCHES**

Adjustable cam activated torque switches to provide over-load protection.

It can only apply to OM-2~13.



OM-1, OM-A & OM-A-M  $(1K\Omega \text{ or } 5K\Omega)$ 

OM-2 ~ 13 (1K $\Omega$  or 5K $\Omega$ )

### **POTENTIOMETER UNIT**

It is synchronous turn with transmission shaft, and it can provide feedback signal for position indicator and etc.



## MODULATING CONTROLLER FOR OM-1, OM-A & OM-A-M

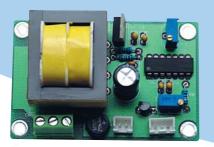
It is a board inside actuator and supplied for OM-1 & OM-A. Input signal: 4-20mA, 1-5V, 2-10V. Output signal: 4-20mA, 2-10V.



### MODULATING CONTROLLER FOR OM-2~13

Modulating actuator: 30% or 75% duty cycle for OM-2 $\sim$ 8 , 50% duty cycle for OM-9 $\sim$ 13. It is a board inside actuator and supplied for OM-2 $\sim$ 13. Input signal: 4-20mA, 1-5V, 2-10V. Output signal: 4-20mA, 2-10V.











(with lock)



(without lock)

OM-2 ~ 13

OM-1, OM-A & OM-A-M

### **CURRENT POSITION TRANSMITTER**

It works with potentiometer unit and provides 4-20mA output signal for position indicator and etc.

### **LOCAL CONTROL UNIT**

Local / Remote selection switches. Open / Close selection switches. It can only apply to OM-2 ~ 13.







## OM-1, OMA & OM-A-M

OM-2 ~ 13

## **HEATER**

A space heater keeps the component parts of the actuator dry and prevents the condensation for low temperature and humidity.

**TRAVEL CAMS & LIMIT SWITCHES** 

	Quarter-turri		
Model No.	Valve Type	Valve Size (inch)	Valve Material
OM-1	Screwed Ends Ball Valve	1/2"~1-1/2"	SUS316/ Bronze/ PVC/ PP
OM-A	Screwed Ends Ball Valve	2"	SUS316/ Bronze/ PVC/ PP
BM-2	Screwed Ends Ball Valve	2"~3"	SUS316/ Bronze/ PVC/ PP
OM-2	Screwed Ends Ball Valve	1-1/4"~2"	SUS316/ Bronze/ PVC/ PP
OM-3	Screwed Ends Ball Valve	2-1/2"~3"	SUS316/ Bronze/ PVC/ PP
OM-4	Screwed Ends Ball Valve	4"	Bronze/ PVC/ PP
OM-1	Socket Welded Ends Ball Valve	1/2"~1-1/2"	PVC/ PP
OM-A	Socket Welded Ends Ball Valve	2"	PVC/ PP
BM-2	Socket Welded Ends Ball Valve	2"~3"	PVC/ PP
OM-2	Socket Welded Ends Ball Valve	1-1/4"~2"	PVC/ PP
OM-3	Socket Welded Ends Ball Valve	2-1/2"~3"	PVC/ PP
OM-4	Socket Welded Ends Ball Valve	4"	PVC/ PP
OM-1	Flanged Ends Ball Valve	1/2"~1"	Cast Iron/ SUS304/ SUS316
OM-A	Flanged Ends Ball Valve	1-1/4"~2"	Cast Iron/ SUS304/ SUS316
BM-2	Flanged Ends Ball Valve	1-1/4"~3"	Cast Iron/ SUS304/ SUS316
OM-2	Flanged Ends Ball Valve	1-1/4"~2"	Cast Iron/ SUS304/ SUS316
OM-3	Flanged Ends Ball Valve	2-1/4"~3"	Cast Iron/ SUS304/ SUS316
OM-4	Flanged Ends Ball Valve	4"~5"	Cast Iron/ SUS304/ SUS316
OM-5	Flanged Ends Ball Valve	6"	Cast Iron/ SUS304/ SUS316
OM-6	Flanged Ends Ball Valve	8"	Cast Iron/ SUS304/ SUS316
OM-7	Flanged Ends Ball Valve	10"	Cast Iron/ SUS304/ SUS316
OM-8	Flanged Ends Ball Valve	12"	Cast Iron/ SUS304/ SUS316
OM-1	3-Way Screwed Ends Ball Valve	1/2"~1-1/2"	Bronze/ SUS316
BM-2	3-Way Screwed Ends Ball Valve	2"	Bronze/ SUS316
OM-2	3-Way Screwed Ends Ball Valve	1-1/2"	Bronze/ SUS316
OM-3	3-Way Screwed Ends Ball Valve	2"	Bronze/ SUS316
OM-1	3-Way Flanged Ends Ball Valve	1"	Cast Iron/ SUS304/ SUS316
BM-2	3-Way Flanged Ends Ball Valve	1-1/2"~2"	Cast Iron/ SUS304/ SUS316
OM-2	3-Way Flanged Ends Ball Valve	1-1/2"	Cast Iron/ SUS304/ SUS316
OM-3	3-Way Flanged Ends Ball Valve	2"	Cast Iron/ SUS304/ SUS316
OM-4	3-Way Flanged Ends Ball Valve	2-1/2"~3"	Cast Iron/ SUS304/ SUS316
OM-5	3-Way Flanged Ends Ball Valve	4"	Cast Iron/ SUS304/ SUS316
OM-A	Butterfly Valve	2"~3"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
BM-2	Butterfly Valve	2"~4"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
OM-2	Butterfly Valve	2"~3"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
OM-3	Butterfly Valve	4"~5"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
OM-4	Butterfly Valve	6"~8"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
OM-5	Butterfly Valve	10"~12"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
OM-6	Butterfly Valve	14"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
OM-7	Butterfly Valve	16"	Cast Iron/ SUS304/ SUS316/ PVC/ PP
OM-8	Butterfly Valve	18"	Cast Iron/ SUS304/ SUS316/ PVC/ PP

Notes: 1.Please check valve torque before mounting.
2.Please check working pressure, service fluid, and temperature.



## SUN YEH ELECTRICAL IND,CO.,LTD.