

Features:

- 350 to 6100 kgf-cm torque output, 7 models.
- Available in IEC IP67 compliant.
- Certificates : CE.
- Each unit has two(2) switch for stop as standard.
- ISO Mounting patterns and female drive output shafts.
- The cover is a Polycarbonate and Aluminum base is Irridited.
- Standard position indicators.
- Standard manual Over-Rides.
- 110VAC, 220VAC, 24VDC and 12VDC models available.
- Temperature : -10°C~60°C.
The humidity : 30%~95%.

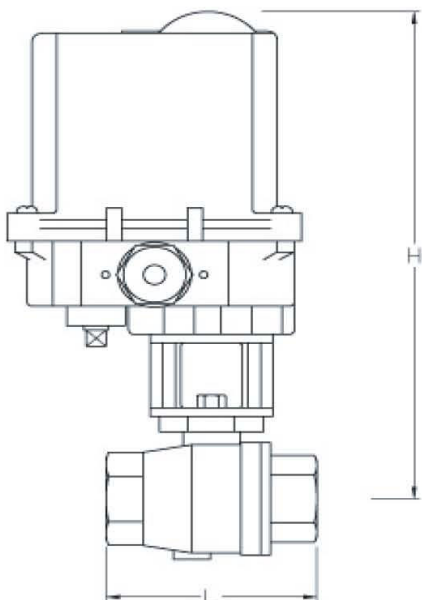
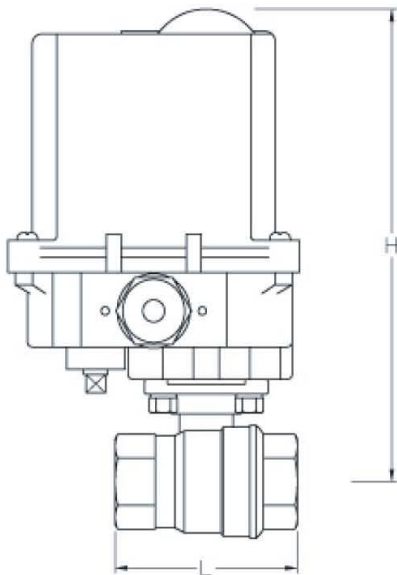
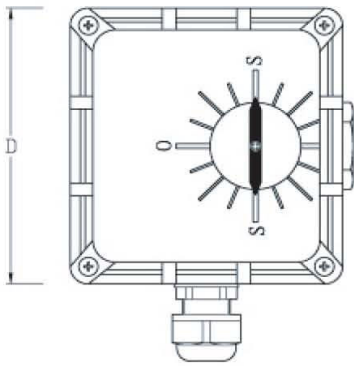


Optional accessories

- 1.Space heater.
2. Additional limit switshes(2units).
3. Modulating control.
4. Potentiometer unit 5k Ohm.
5. Local control unit.
6. Built -in LED position indicator .
7. Various power supply.

Specification and Performance Data - Open/Close

Actuator Model	Torque kgf-cm	Time For 90° Travel	Current draw max.50/60Hz		Manual Override	Weight (Kg)	Mounting Flange ISO 5211
			110V1-ph	220V1-ph			
UM-01	350	12 / 10Sec	0.6 / 0.7A	0.29 / 0.38A	Lever	1.7	F03,F04,F05,F07
UM-02	500	12 / 10Sec	0.8 / 0.9A	0.4 / 0.5A	Lever	1.8	F03,F04,F05,F07
UM-03	1700	10 / 8Sec	1.0 / 1.2A	0.69 / 0.72A	Lever	4.4	F05,F07
UM-03H	2070	12 / 10Sec	1.0 / 1.2A	0.69 / 0.72A	Hand-wheel	7.9	F07,F10,F12
UM-04H	3800	36 / 30Sec	1.0 / 1.2A	0.69 / 0.72A	Hand-wheel	8.6	F07,F10,F12
UM-05H	5020	36 / 30Sec	1.8 / 2.0A	1.0 / 0.75A	Hand-wheel	8.8	F07,F10,F12
UM-06H	6100	36 / 30Sec	2.8 / 2.4A	1.1 / 0.8 A	Hand-wheel	9.1	F07,F10,F12



Equipped with ball valve

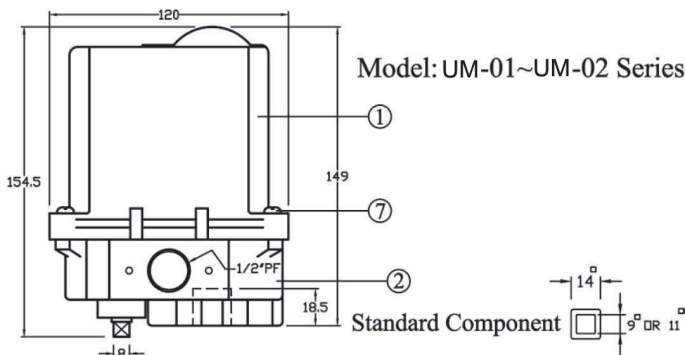
MODEL	PIPE SIZE	DIMENSION (mm)		
		L	H	D
UM-01-15-BLV	1/2"	71	186	127
UM-01-20-BLV	3/4"	80	190	127
UM-01-25-BLV	1"	89	195	127
UM-01-35-BLV	1-1/4"	105	202	127
UM-01-40-BLV	1-1/2"	121	217	127
UM-02-50-BLV	2"	140	223	127

Equipped with mounting kit ball valve

MODEL	PIPE SIZE	DIMENSION (mm)		
		L	H	D
UM-01-15S-BLV	1/2"	62	214	127
UM-01-20S-BLV	3/4"	73	219	127
UM-01-25S-BLV	1"	80	224	127
UM-01-35S-BLV	1-1/4"	96	235	127
UM-01-40S-BLV	1-1/2"	115	239	127
UM-02-50S-BLV	2"	133	250	127

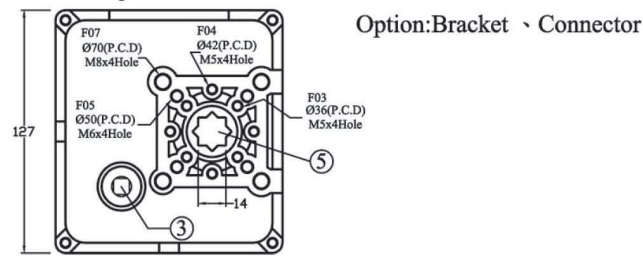
DIMENSIONS:

(UNIT : mm)

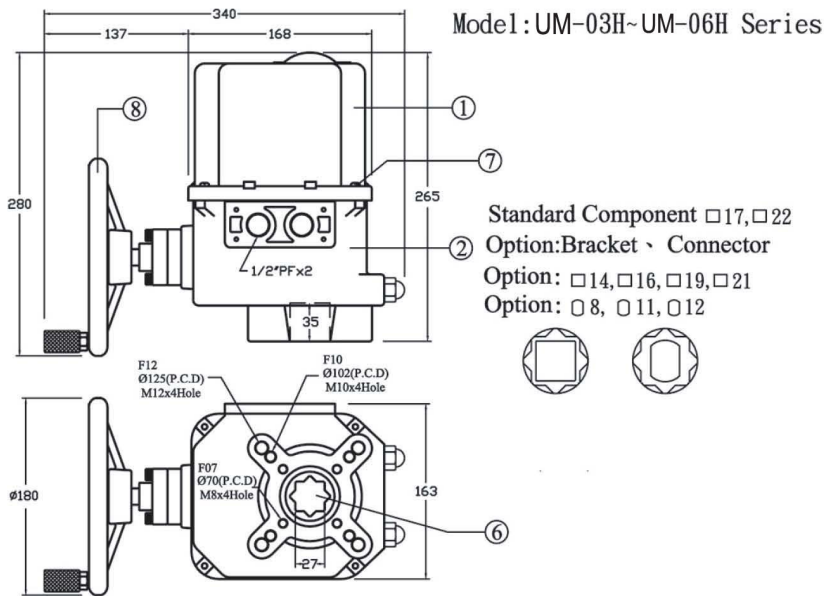


Model: UM-01~UM-02 Series

Standard Component $\square 14$ $\square 9^{\circ}$ DR 11°

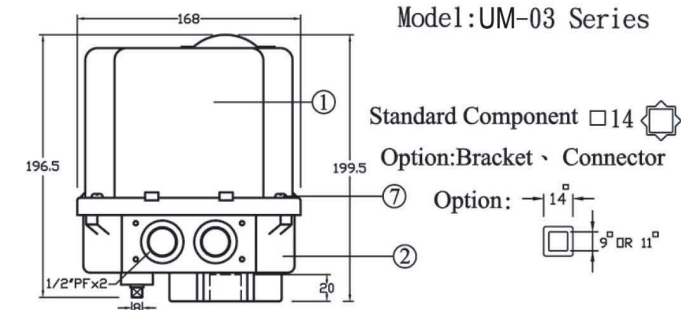
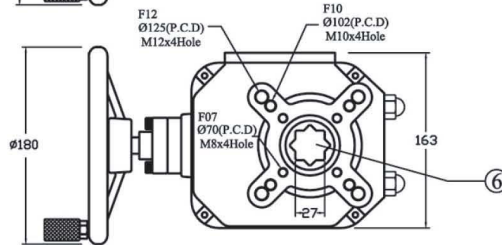


Option: Bracket · Connector



Model: UM-03H~UM-06H Series

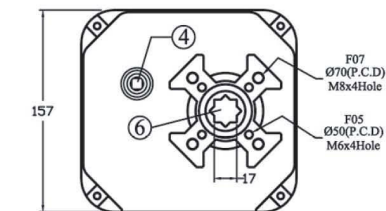
Standard Component $\square 17$, $\square 22$
Option: Bracket · Connector
Option: $\square 14$, $\square 16$, $\square 19$, $\square 21$
Option: $\square 8$, $\square 11$, $\square 12$



Model: UM-03 Series

Standard Component $\square 14$ $\square 9^{\circ}$ DR 11°

Option: Bracket · Connector

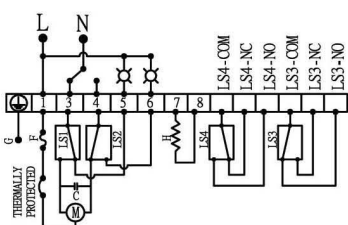


Electric Actuator Parts

Part	Description	Material
1.	Upper Housing	Polycarbonate
2.	Base	Aluminum
3.	Manual Shaft(UM-01,02)	SUS
4.	Manual Shaft(UM-03)	S45C
5.	Output Shaft(UM-01,02)	FDC0205-95H
6.	Output Shaft(UM-03~06H)	S45C
7.	Housing Bolts	300SS
8.	Handwheel	Aluminum

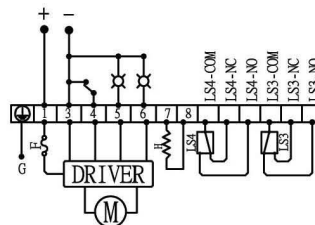
WIRING DIAGRAMS:

WIRING DIAGRAM :110/220V AC



- (1)1-Power Supply
- (2)3-Power-N is "Open"
- (3)4-Power-N is "Close"
- (4)5-Lamp "Open"
- (5)6-Lamp "Close"
- (6)7. 8-Heater(Optional)
- (7)LS3 Auxiliary Limit Switch "Open"(Option)
- (8)LS4 Auxiliary Limit Switch "Close"(Option)

WIRING DIAGRAM :24V DC



- (1)Connect 1 with "+"
Connect 3 with "-"
- (2)Connect 3 with 4 "Open"
- (3)Disconnect 3 with 4 "Close"
- (4)5-Lamp "Open"
- (5)6-Lamp "Close"
- (6)7. 8-Heater(Optional)
- (7)LS3 Auxiliary Limit Switch "Open"(Option)
- (8)LS4 Auxiliary Limit Switch "Close"(Option)

UM - Series Actuator To Valve Selection Chart

Model No.	Valve Type	Valve Size(inch)	Valve Material
UM -01	Screwed Ends Ball Valve	1/2"~1-1/2"	SUS316/PVC/PP
UM -02	Screwed Ends Ball Valve	2"	SUS316/PVC/PP
UM -03	Screwed Ends Ball Valve	1-1/2"~ 3"	SUS316/PVC/PP
UM -03H	Screwed Ends Ball Valve	1-1/2"~3"	SUS316/PVC/PP
UM-01	Socket Welded Ends Ball Valve	1/2"~1-1/2"	PVC/PP
UM-02	Socket Welded Ends Ball Valve	2"	PVC/PP
UM-03	Socket Welded Ends Ball Valve	2"~ 3"	PVC/PP
UM-03H	Socket Welded Ends Ball Valve	2"~3"	PVC/PP
UM-04H	Socket Welded Ends Ball Valve	4"	PVC/PP
UM -01	Flanged Ends Ball Valve	1/2"~1"	Cast Iron/SUS304/SUS316
UM -02	Flanged Ends Ball Valve	1-1/4"~2"	Cast Iron/SUS304/SUS316
UM -03	Flanged Ends Ball Valve	2"~3"	Cast Iron/SUS304/SUS316
UM-03H	Flanged Ends Ball Valve	2"~3"	Cast Iron/SUS304/SUS316
UM-04H	Flanged Ends Ball Valve	4"	Cast Iron/SUS304/SUS316
UM-05H	Flanged Ends Ball Valve	5"	Cast Iron/SUS304/SUS316
UM-06H	Flanged Ends Ball Valve	6"	Cast Iron/SUS304/SUS316
UM -01	3-Way Screwed Ends Ball Valve	1/2"~1"	SUS316
UM -02	3-Way Screwed Ends Ball Valve	1-1/4"~1-1/2"	SUS316
UM -03	3-Way Screwed Ends Ball Valve	2"	SUS316
UM-02	3-Way Flanged Ends Ball Valve	1"	Cast Iron/SUS304/SUS316
UM-03	3-Way Flanged Ends Ball Valve	1-1/2"~2-1/2"	Cast Iron/SUS304/SUS316
UM-03H	3-Way Flanged Ends Ball Valve	1-1/2"~2-1/2"	Cast Iron/SUS304/SUS316
UM-04H	3-Way Flanged Ends Ball Valve	3"	Cast Iron/SUS304/SUS316
UM-05H	3-Way Flanged Ends Ball Valve	4"	Cast Iron/SUS304/SUS316
UM-06H	3-Way Flanged Ends Ball Valve	5"	Cast Iron/SUS304/SUS316
UM -02	Butterfly Valve	2"~3"	Cast Iron/SUS304/SUS316
UM -03	Butterfly Valve	2"~5"	Cast Iron/SUS304/SUS316
UM-03H	Butterfly Valve	2"~6"	Cast Iron/SUS304/SUS316
UM-04H	Butterfly Valve	8"	Cast Iron/SUS304/SUS316
UM-05H	Butterfly Valve	10"	Cast Iron/SUS304/SUS316
UM-06H	Butterfly Valve	12"	Cast Iron/SUS304/SUS316

Notes:

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

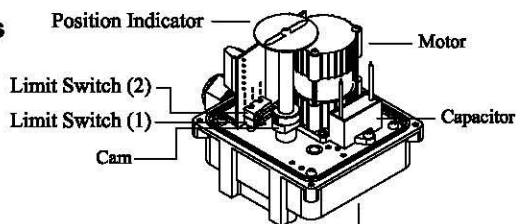
The Using Instruction Of The Product

※ Installation

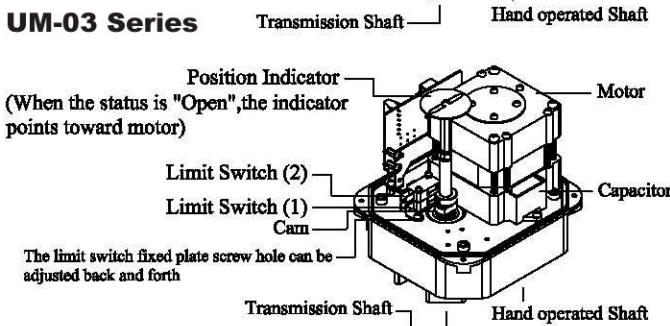
1. Please confirm the input voltage before power up.
2. Please follow the instruction manual to connect the wire. Do not alter the circuit to avoid electric shock.
3. This product should be operated as a single unit. Do not connect multiple units in parallel or serial.
4. If two sets or more are used at the same time, please install relay for each unit to ensure the safety of the operation.
5. Do not use this product in presence of explosive gas or any other chemical active substance.
6. Before installing, make sure nothing is clogging the pipe line.
7. While in manual operation or maintenance, be sure to shut down power before. Opening the soft cover. Aftermath, the soft cover should be placed securely before power up.
8. UM-03H~UM-06H series need to shut down power to operate in manual mode. Push down the handwheel to engage the shaft. It will be dis-engage automatically when released.
9. In manual mode, if abnormal friction is felt in turning the valve, please do not exert excess force to avoid damaging the parts.
10. The indicator window shows the status of the valve(O=OPEN,S=Close).
11. After connecting the wires, make sure O-ring is in the groove before fastening the housing screws to insulate dust or rain.
12. Three minutes rest is need before restart.
(The special type does not receive this restriction)
13. In case of malfunction, please contact local dealer.
14. The AC110V/220V moter has overheat protection. When coutomers use the PCB series, all of the PCB board have a fuse.
15. DC12V, DC24V and AC/DC-24V moters do not have overheat protection. For PCB series, there is a fuse on the board.
(It is not a standart product, it may have the different device of protection, dependon situation at that time)
16. Use only fuse specification listed in the manual. Do not use the other spec for replacement.
17. UM-01A -UM-02A -UM-03 -UM-03H~UM-06H series can be used with proportion controller.
(If detailed information, please to contact seller)

※If unnecessary please do not dismount electric actuator & valve to avoid the position disorder.
If the position has moved , please adjust refer to the instruction of the drawing as follows:

UM-01 Series UM-02



UM-03 Series



Cam Acting Drawing

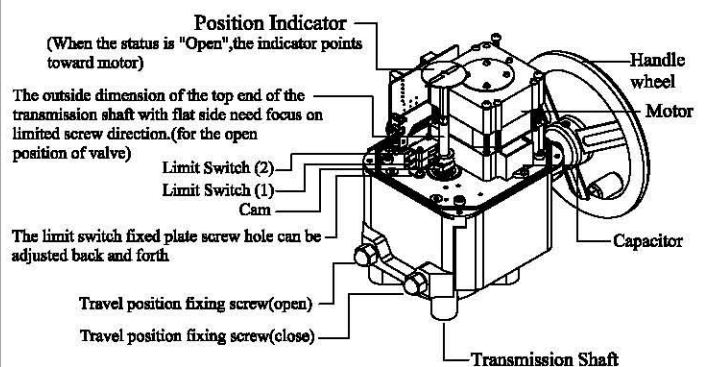
Adjustable Tools:Hexangular Wrench(2.5Hx1)



Cam Acting Instruction

1. The cam has fixed on main transmission shaft.
2. The transmission shaft counterclockwise turns make valve open,the limit switch (1) rebound, open valve acting stop.
3. The transmission shaft clockwise turns makes valve close,the limit switch (2) rebound, close valve acting stop.

UM-03H~UM-06H Series

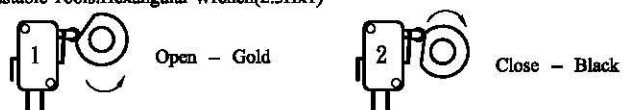


Caution

1. Before adjusting the valve open degree,please make limited screw counterclockwise withdraw about 3 cm.
2. After position fixing finish adjust and confirm energize one more time.If no problem,go on adjusting action for 3 or 4.
3. When valve full open : is limited screw (open) .clockwise lock in touching top end limited plate and make screw cap lockly and tightly.
4. When valve full close : is limited screw (close) .clockwise lock in touching top end limited plate and make screw cap lockly and tightly.

Cam Acting Drawing

Adjustable Tools:Hexangular Wrench(2.5Hx1)



Cam Acting Instruction

1. The cam has fixed on main transmission shaft.
2. The transmission shaft counterclockwise turns make valve open,the limit switch (1) rebound, open valve acting stop.
3. The transmission shaft clockwise turns makes valve close,the limit switch (2) rebound, close valve acting stop.