

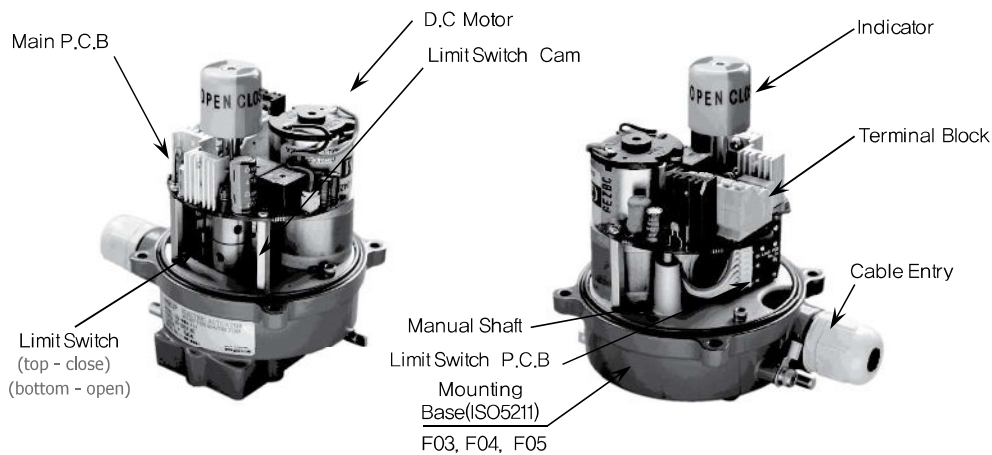


## 11-1

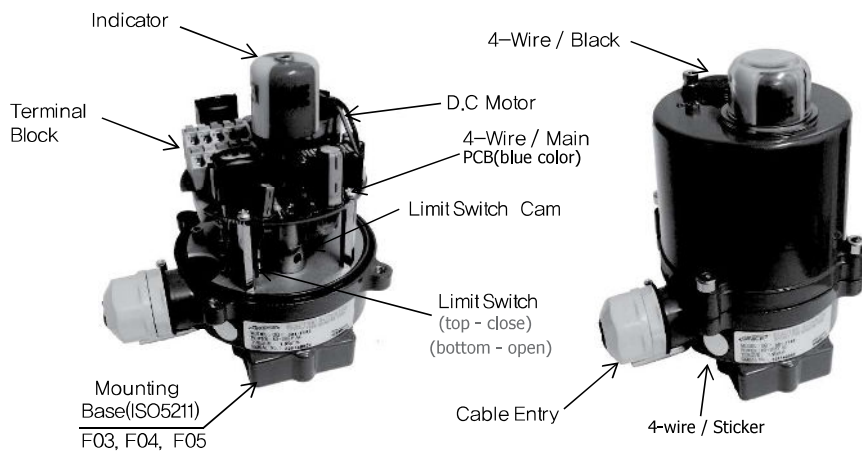
## Quarter-turn actuator GQ - 001, 002, 004

### Construction

#### ▶ Actuator Appearance (INSIDE) - 3Wire



#### ▶ Actuator Appearance (INSIDE) - 4Wire



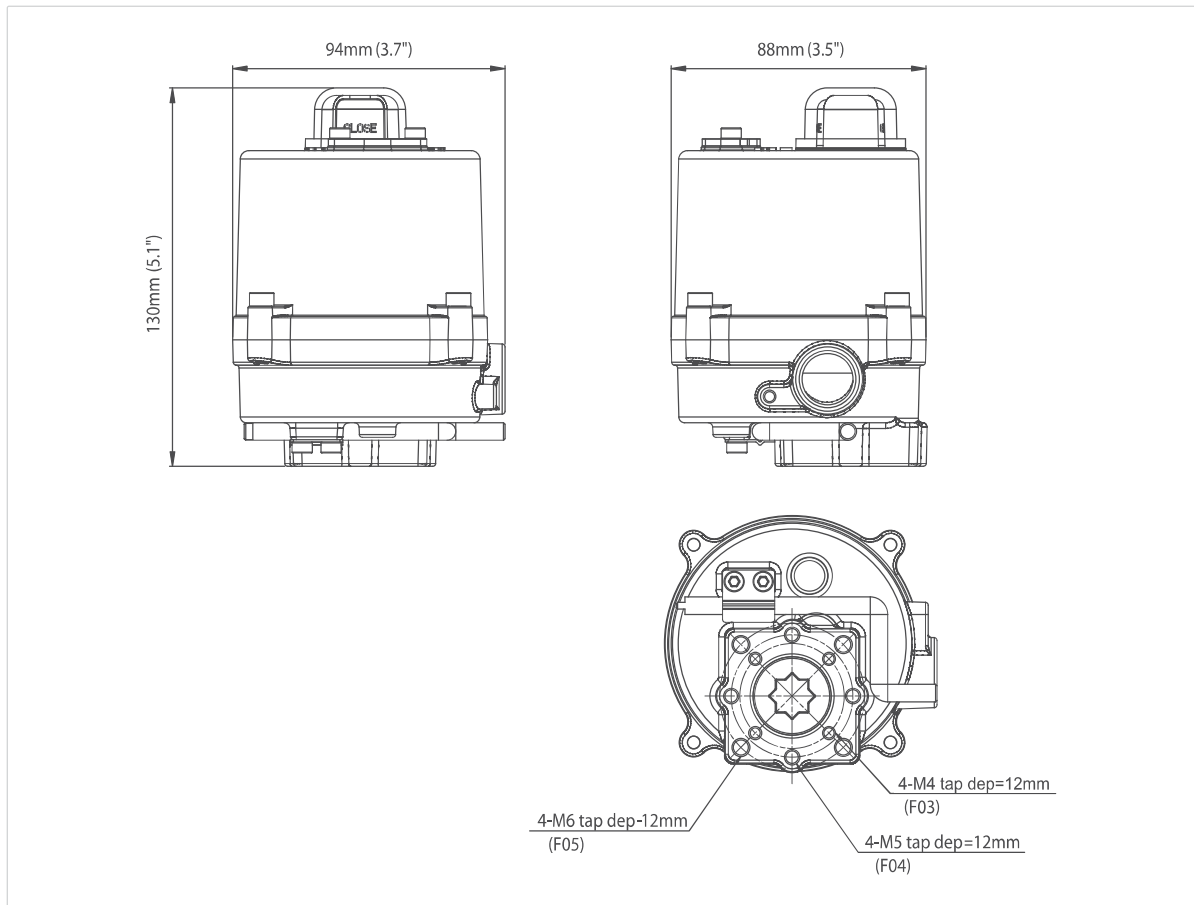
### Description

Electric actuator is specially designed for small size quarter turn valve operation such as Ball valves / Small dampers and similar usages.

### Features

- Free-Voltage : (95~245VAC/1PH)  
(24VAC/DC)(12VAC/DC)
- Weather proof (IP67)
- Manual lever
- Mounting base : Standard ISO5211(F03/F04/F05)

## Dimensions

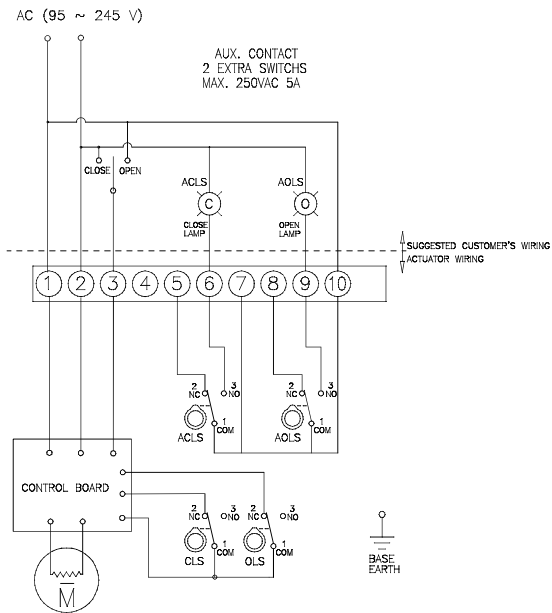


## Performance

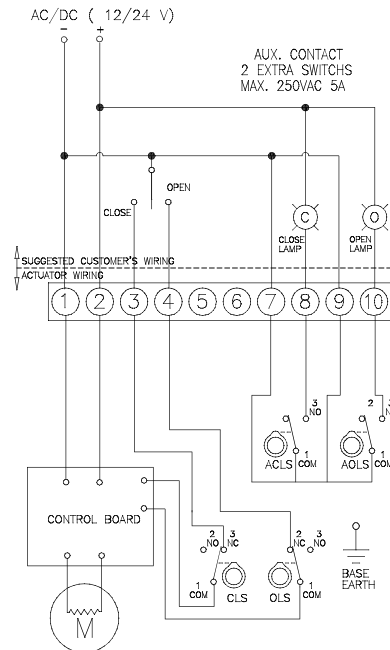
Model	Output Torque		Operating Time 50/60Hz	Supplying Power (50/60Hz, 1 phase)	Duty Cycle IEC 34-1	Electric Motor IEC 34-1	Mounting (ISO 5211)	Mounting base (mm)	Weight
	Kg.m	N.m	90°						
GQ - 001	1.5	15	3 sec	V1=95V~245VAC (free) V2=24V AC/DC V3=12V AC/DC	S2 50%	2A	F03, F04, F05	11 x 11	1.2Kg
GQ - 002	2	20	4 sec		S2 50%	2A	F03, F04, F05	14 x 14	1.2Kg
GQ - 004	4	40	7 sec		S2 50%	2A	F03, F04, F05	14 x 14	1.2Kg

## Wiring Diagram

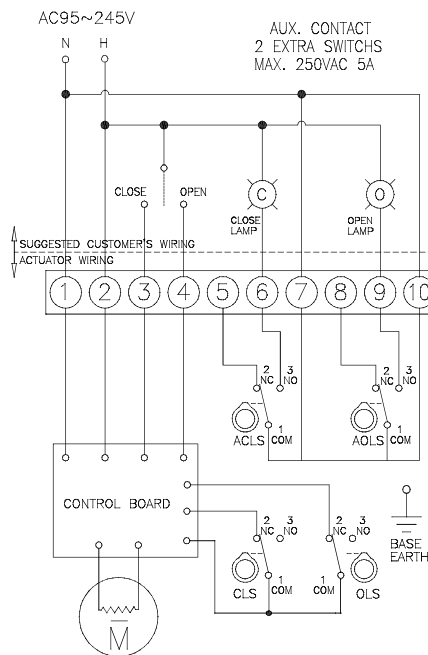
### ▶ AC ON-OFF (3Wire)



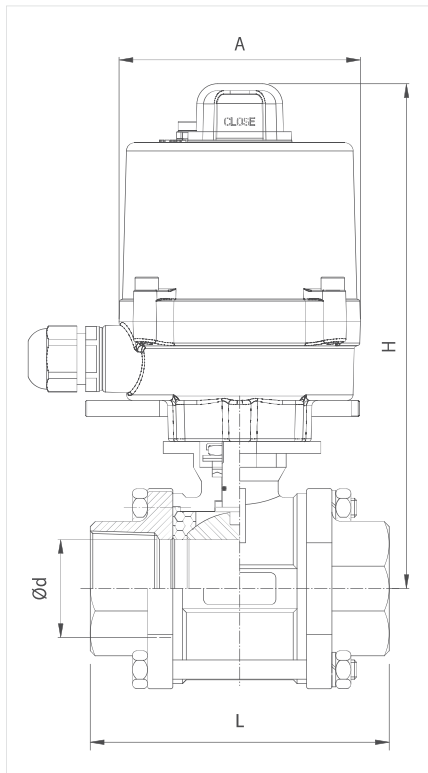
### ▶ AC/DC ON-OFF



### ▶ AC ON-OFF(4Wire)



## Electric Ball valve(2-way)



Dimensions (3-Piece)

(Unit : mm)

SIZE		Ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE N.m
Inch	mm									
1/4"	8A	11.6	63.5	166.9	94	KV23-08 / GQ-004	9	F03, 05	2.4	4
3/8"	10A	12.8	63.5	166.9	94	KV23-10 / GQ-004	9	F03, 05	2.4	4
1/2"	15A	15	63.5	166.9	94	KV23-15 / GQ-004	9	F03, 05	2.5	4
3/4"	20A	20	72.5	175	94	KV23-20 / GQ-004	9	F03, 05	2.5	6
1"	25A	25	81	183.4	94	KV23-25 / GQ-004	11	F03, 05	3.5	9.8
1-1/4"	32A	32	94.5	188.9	94	KV23-32 / GQ-004	11	F03, 05	4.0	16.4

\* 3-PIECE BODY - Max. Pressure: 70kg/cm<sup>2</sup>, Max. Temperature: 160°C, Material: A351-CF8M, Seat : PTFE

SIZE		Ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE N.m
Inch	mm									
1/4"	8A	11.6	63.5	166.9	94	KV23-08 / GQ-002	9	F03, 05	2.4	4
3/8"	10A	12.8	63.5	166.9	94	KV23-10 / GQ-002	9	F03, 05	2.4	4
1/2"	15A	15	63.5	166.9	94	KV23-15 / GQ-002	9	F03, 05	2.5	4
3/4"	20A	20	72.5	175	94	KV23-20 / GQ-002	9	F03, 05	2.5	6
1"	25A	25	81	183.4	94	KV23-25 / GQ-002	11	F03, 05	3.5	9.8

SIZE		Ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE N.m
Inch	mm									
1/4"	8A	11.6	63.5	166.9	94	KV23-08 / GQ-001	9	F03, 05	2.4	4
3/8"	10A	12.8	63.5	166.9	94	KV23-10 / GQ-001	9	F03, 05	2.4	4
1/2"	15A	15	63.5	166.9	94	KV23-15 / GQ-001	9	F03, 05	2.5	4
3/4"	20A	20	72.5	175	94	KV23-20 / GQ-001	9	F03, 05	2.5	6

\* Model : KV23 (2 : 2-Way Ball Valve, 3 : 3-Piece)

## Standard

Model	Phase	Voltage[V]	Frequency [Hz]	Consumption power[VA]
GQ - 001,002, 004	-	12	-	7.56
		24	-	8.64
	1PH	110	50	39.6
		110	60	39.6
		220	50	79.2
		220	60	79.2

**GQ - XXX - X X X X**

001 : 1.5Kg.m  
002 : 2Kg.m  
004 : 4Kg.m

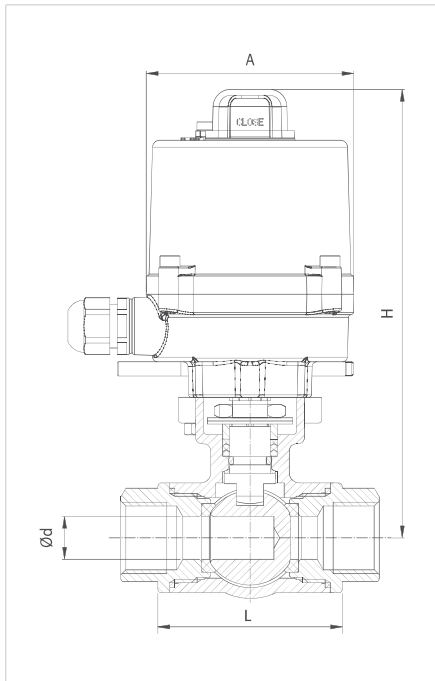
1. 11x11  
2. 14x14

1. 3Wire  
2. 4Wire

1. AC (95 ~ 245V)  
2. AC / DC 24V  
3. AC / DC 12V

1. IP 67

## Electric ball valve(3-way)



Dimensions (1-Piece)

(Unit : mm)

SIZE		ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE N.m
Inch	mm									
1/4"	8A	11	72	171	94	KV30-08 / GQ-004	9	F03, 04	1.9	9
3/8"	10A	11	72	171	94	KV30-10 / GQ-004	9	F03, 04	1.9	9
1/2"	15A	12	72	171	94	KV30-15 / GQ-004	9	F03, 04	2.1	9
3/4"	20A	15	83	174.3	94	KV30-20 / GQ-004	9	F03, 04	2.7	11
1"	25A	20	99	183.5	94	KV30-25 / GQ-004	11	F04, 05	3.4	13

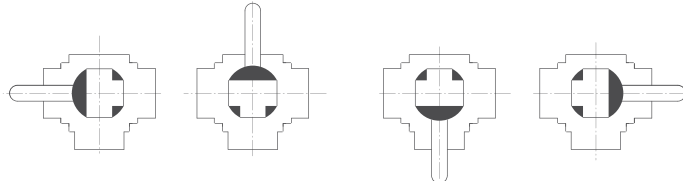
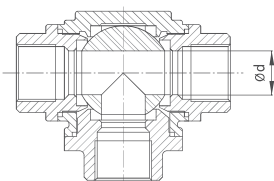
\* BODY - Max. Pressure: 70kg/cm<sup>2</sup> (1/4"~ 1 1/4"), 56kg/cm<sup>2</sup> (1 1/2"~ 2")  
Max. Temperature: 180°C, Material: A351-CF8M, Seat : PTFE

SIZE		ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE N.m
Inch	mm									
1/4"	8A	11	72	171	94	KV30-08 / GQ-002	9	F03, 04	1.9	9
3/8"	10A	11	72	171	94	KV30-10 / GQ-002	9	F03, 04	1.9	9
1/2"	15A	12	72	171	94	KV30-15 / GQ-002	9	F03, 04	2.1	9
3/4"	20A	15	83	174.3	94	KV30-20 / GQ-002	9	F03, 04	2.7	11

SIZE		ød	L	H	A	Body/Actuator	Stem (mm)	ISO5211 (PCD)	WT (Kg)	TORQUE N.m
Inch	mm									
1/4"	8A	11	72	171	94	KV30-08 / GQ-001	9	F03, 04	1.9	9
3/8"	10A	11	72	171	94	KV30-10 / GQ-001	9	F03, 04	1.9	9
1/2"	15A	12	72	171	94	KV30-15 / GQ-001	9	F03, 04	2.1	9

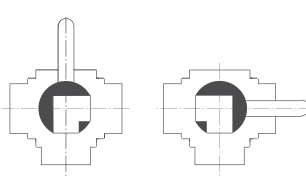
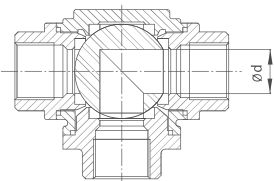
T - POSITION

T - POSITION 90° TURN



L - POSITION

L - POSITION 90° TURN



## Table of valve size for GQ Series

Valve Actuator	Actuator Torque (N.m)	2-Way Ball Valve 10K, ANSI 150#	Operating Time	3-Way Ball Valve 10K, ANSI 150#	Operating Time
GQ - 001	15	8A(1/4")~20A(3/4")	3	8A(1/4")~15A(1/2")	3
GQ - 002	20	8A(1/4")~25A(1")	4	8A(1/4")~20A(3/4")	4
GQ - 004	40	8A(1/4")~32A(1 1/4")	7	8A(1/4")~25A(1")	7

The above specification can be changed as difference torque per each valve manufacturer.