

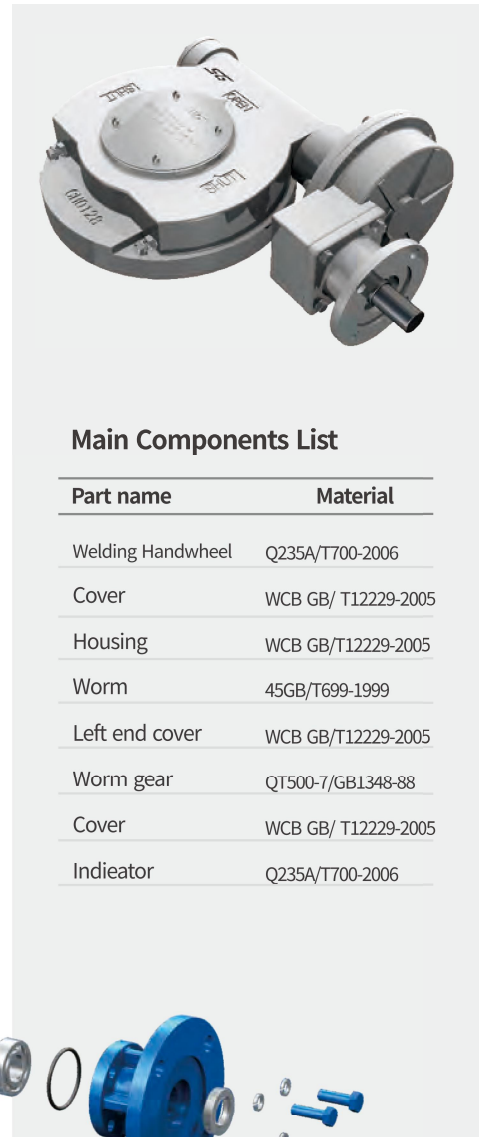
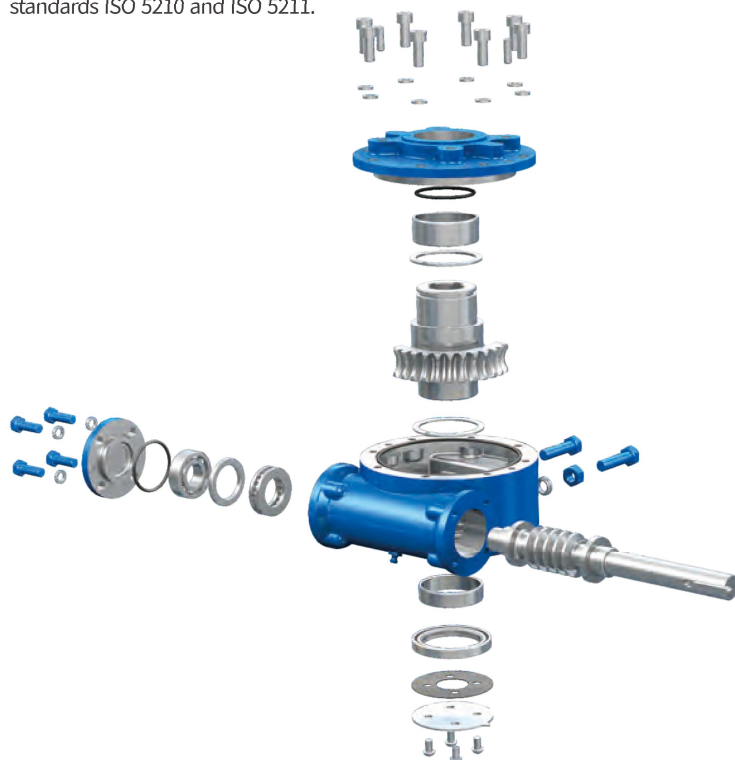
# SG series

## Electric-powered partial-turn gear operators

SG series is a 90° rotary gear operator suitable for use on ball valves, butterfly valves, and plug valves with a manual, electric or hydraulic actuator.

Ratio Speed: 31:1 ~ 190:1; Output Torque: 650 Nm ~ 50000Nm, Gearbox Material: WCB Worm Gear Material: QT600-3 Ingress of Protection: IP67 ~ IP68

Both the input and output connecting flanges are designed as per standards ISO 5210 and ISO 5211.



### Main Components List

Part name	Material
Welding Handwheel	Q235A/T700-2006
Cover	WCB GB/ T12229-2005
Housing	WCB GB/T12229-2005
Worm	45GB/T699-1999
Left end cover	WCB GB/T12229-2005
Worm gear	QT500-7/GB1348-88
Cover	WCB GB/ T12229-2005
Indieator	Q235A/T700-2006

### Instructions for Installation and Operation

Connect the bottom flange of the gear operator to the upper flange of the valve and slide the valve shaft into the hole on the worm gear. Tighten the flange bolt. The valve can be closed by turning the hand-wheel clockwise and opened by turning the hand-wheel counterclockwise. On the upper face of the gear operator, a position indicator and a position marking are mounted, through which the position of switch can be directly observed. The gear operator is also equipped with a mechanical limit screw, which can be adjusted and function to limit the position at the switch extreme position.

### Product Feature

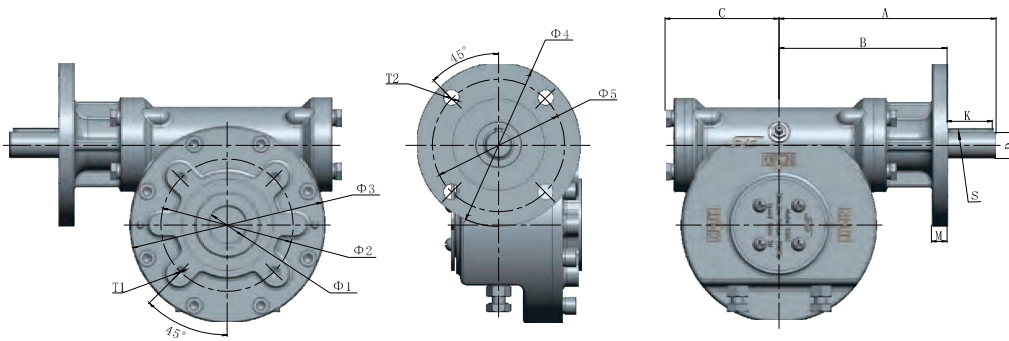
- 1. WCB casing
- 2. Welded hand-wheel (200 or above)
- 3. IP67 grade protection
- 4. Nickel-plated input shaft, with more resistance to corrosion
- 5. Ductile iron worm gear
- 6. NBR sealing materials
- 7. Suitable for -20°C ~ 120°C working conditions

### Customization

- 1. IP68 grade protection
- 2. Aluminum-bronze worm gear
- 3. Stainless steel input shaft
- 4. For high temperature up to 170°C
- 5. For low temperature down to -40°C

## Main Technical Parameter

Model	Ratio	Connecting flange to actuator ISO5210	Rating input N.m	Rating output N.m	Maximum output N.m
SG62	31:1	F10	75	650	700
SG83	45:1	F10	100	1350	1400
SG120	70:1	F10	120	2700	2800
SG123	70:1	F10	100-120	3000	3000
SG123A	136:1	F10/F12	120	5700	6000
SG143	70:1	F10	160	4000	
SG143A	136:1	F10	250	7000	8000
SG200	70:1	F16	400	9000	12000
SG200A	140:1	F16	400	16000	20000
SG237	70:1	F16	600	12000	14000
SG237A	140:1	F16	1000	40000	43000
SG242A	190:1	F16	600	32500	34000
SG242A	190:1	F25	1000	50000	50000



## Main Technical Parameter

Model	A	B	C	D	D	K	S	M	P	Q	*φ1	*φ2	φ3	φ4	φ5	T1	T2
SG62	167.5	129.5	86	86	20	35	6*35	12	91	61	30	102	150	125	102	4-M10*18	4-φ12
SG83	170	132	88	88	20	35	6*35	12	91	62	40	125	175	125	102	4-M12-20	4-φ12
SG120	197	159	119	119	25	35	6*35	12	105	72	50	165	262	125	102	4-M20-30	4-φ12
SG123	241	188	140	140	25	35	8*35	15	102	54	65	140	273	125	102	4-M16-25	4-φ12
SG123A	408	343	140	140	25	35	8*35	15	102	54	65	140	273	125	102	4-M16-25	4-φ12
SG143	261	208	154	154	25	35	8*35	15	119	62.5	75	165	310	125	102	4-M20-25	4-φ12
SG143A	426	364	154	154	25	35	8*35	15	119	62.5	75	165	310	125	102	4-M20-25	4-φ12
SG200	324	275	194.5	194.5	30	40	8*40	20	132	70.5	75	165	425	210	165	4-M20-25	4-φ22
SG200A	495	442	194.5	194.5	30	40	10*45	20	132	70.5	75	254	425	210	165	4-M20-25	4-φ22
SG237	360	304	224	224	40	50	12*50	20	150	80	120	254	495	210	165	8-M16*25	4-φ22
SG237A	531	478	224	224	30	45	10*45	18	150	80	120	254	495	175	140	8-M16*25	4-φ18
SG242A	605	526	248	248	40	70	12*70	20	163	92	135	298	516	210	165	8-M20*30	4-φ22
SG242A	605	526	248	248	40	70	12*70	20	163	92	135	406	516	300	254	8-M36*40	8-φ18