

# SGJ series

## Partial-turn gear operators

This single-stage gear operator series with cast steel box is widely used in gas, oil, chemical plants, and nuclear power plants and for general industrial applications, with the torque ranging from 1000NM to 5600NM and the speed ratio from 30:1 to 140:1.



### 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
Indiator	Q235A/T700-2006
Gear wheel	45GB/T699-1999
Gear shaft	45GB/T699-1999
Gear box	WCB GB/ T12229-2005

### 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 Features

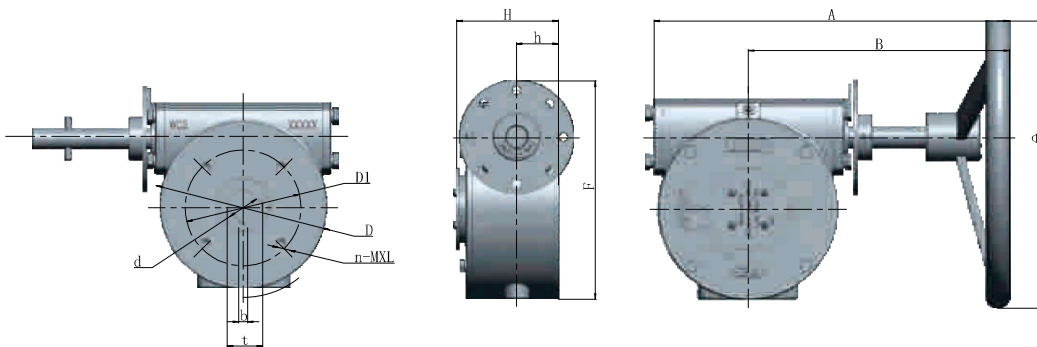
- 1. WCB casing
- 2. Welded hand-wheel (200 or above)
- 3. IP67 grade protection
- 4. Nickel-plated input shaft, with more resistance to corrosion
- 5. Ductile iron worm gear
- 6. NBR sealing materials
- 7. Suitable for -20°C ~ 120°C working conditions

### Customization

- 1. 306, 304, LCC, or LCB casing
- 2. IP68 grade protection
- 3. Aluminum-bronze worm gear
- 4. Stainless steel input shaft
- 5. For high temperature up to 170°C
- 6. For low temperature down to -40°C
- 7. Designed with a lock mechanism

### Main Technical Parameter

Model	Ratio	Rating input (Nm)	Rating output (Nm)	Efficiency(%)	Hand-wheel
SGJ30	30:1	110	1000	27	Φ300
SGJ50	50:1	100	1400	28	Φ300
SGJ80	80:1	115	2500	27	Φ400
SGJ70	70:1	200	4500	29	Φ705
SGJ140	140:1	145	5600	28	Φ600



### Main Technical Parameter

Model	d	dmax	b	t	D	D1	n-MXL	A	B	F	H	Φ	Gear ratio	Output torque NM	Weight Kg
SGJ30	22.20	30	5	24.5	φ158	φ102	4-M10X15	317	230	195	90	300	30:1	1000	13.1
	28.60	30	8	31.9	φ175	φ140	4-M16X20	317	230	195	90	300	30:1	1000	13.1
SGJ50	31.80	45	8	35.1	φ180	φ125	4-M12X18	313	321	220	101	300	50:1	1400	17.7
SGJ80	33.30	54	10	36.6	φ248	φ140	4-M16X25	449	321	310	120	400	80:1	2500	38.3
	38.10	54	10	41.5	φ248	φ165	4-M20X25	449	321	310	120	400	80:1	2500	38.3
SGJ70	41.3	85	10	44.6	φ260	φ165	4-M20X26	575	445	316	120	705	70:1	4500	45
	50.8	85	16	55.1	φ300	φ254	8-M16X25	575	445	316	120	705	70:1	4500	45
SGJ140	75	85	20	79.9	φ260	φ165	4-M20X26	502	380	316	132	600	140:1	5600	58
	75	85	20	79.9	φ300	φ254	8-M16X25	502	380	316	132	600	140:1	5600	58