SGJ Series

Cast-Iron Gearbox

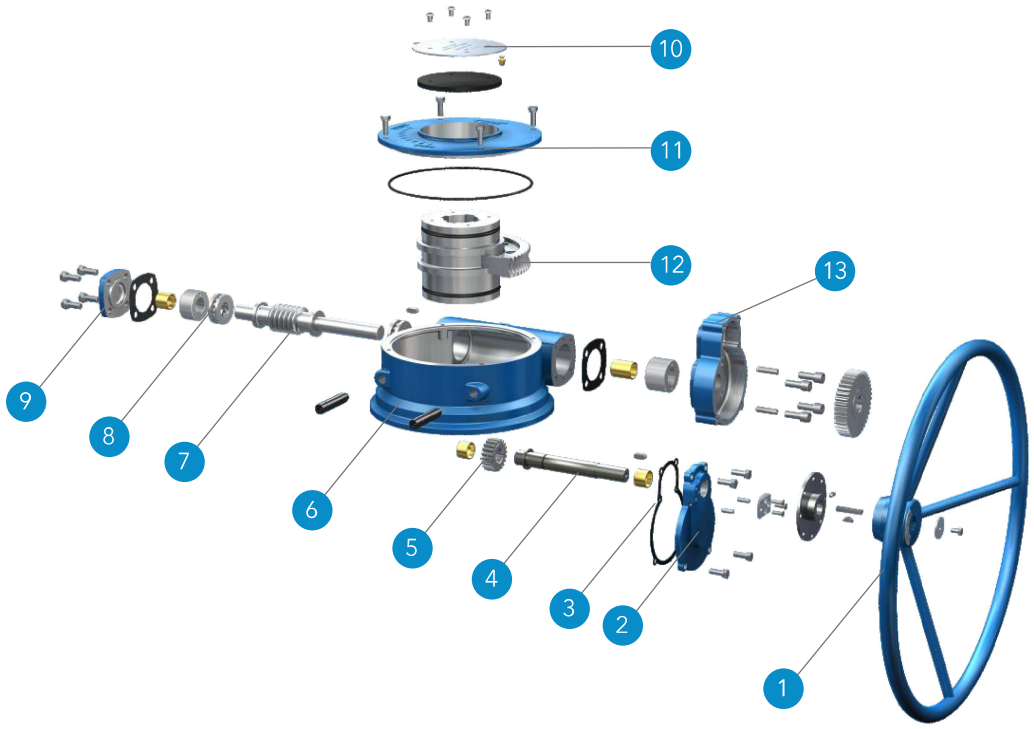
Rugged and reliable cast steel part-turn gearbox for high torque manual valve applications. Suitable for oil, gas, chemical, nuclear and other demanding industrial valves. Suitable for ball, butterfly or plug valves and other part-turn valves.
Torque range:1000Nm~5600Nm
5 sizes. Ratios from: 30:1 to 140:1

Features:

Welding hand wheel
WCB housing
Ductile iron quadrant
Locking device
Travel range: 0°~90° (±5° adjustment)
IP67
Standard temperature range: -20°C~120°C

Options:

LCB housing
Stainless steel housing
Stainless steel input shafts and fasteners
IP68
Namur switch connection
Low temperature: -46°C
High temperature: +200°C
Bronze quadrant
Buried application



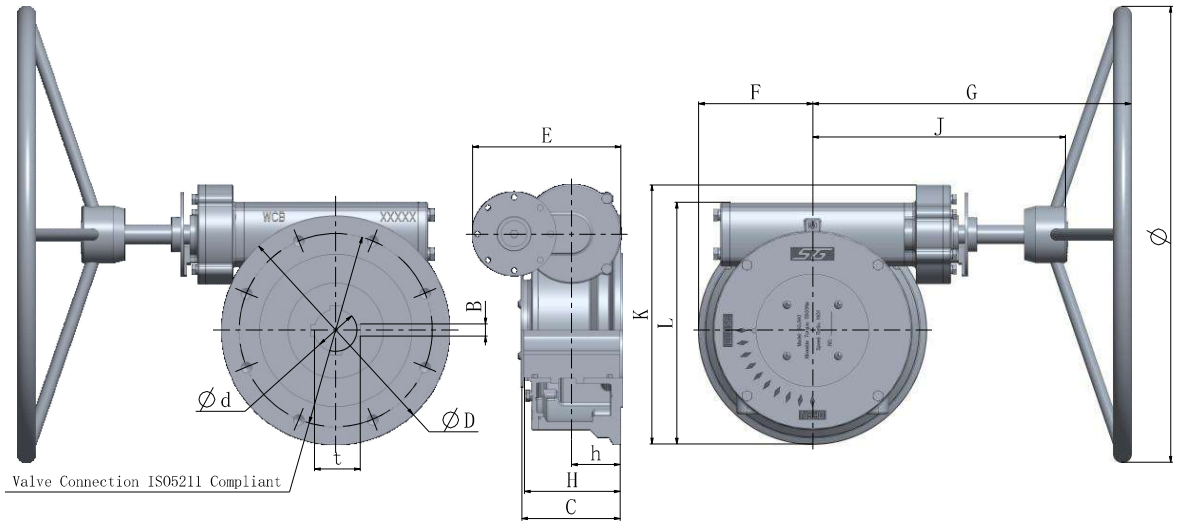
Material Specification

No.	Part name	Material				
		GB	ASTM/AWS	DIN	BS	ISO
1	Hand wheel	Q235A	A570 Gr.A	S235JR	S235JR	Fe 360A
2	Secondary Coverplate	ZG280-520	WCB	GS-20Mn5	GP280GH	C26-52
3	Seal			NBR		
4	Input shaft	45	1045	C45E CK45	C45E 080M46	C45E4
5	Gear	45	1045	C45E CK45	C45E 080M46	C45E4
6	Body	ZG280-520	WCB	GS-20Mn5	GP280GH	C26-52
7	Worm	45	1045	C45E CK45	C45E 080M46	C45E4
8	Bearing	Tapered Roller Bearings / Thrust Ball Bearing				
9	Side Cover	ZG280-520	WCB	GS-20Mn5	GP280GH	C26-52
10	Position Indicator	1Cr17Mn6Ni5n	?201			X12CrMNi17-7-5
11	Coverplate	QT450-10	65-45-12		420/12	450-10
12	Quadrant	QT500-7	88-55-06	GGG-50	500/7	500-7
13	Secondary Body	ZG280-520	WCB	GS-20Mn5	GP280GH	C26-52

Note: Due to the company's policy of continuous improvement, Stard-Gears reserves the right to change specification details without prior notice.

Main Technical Specifications

Model	Ratio	Input Torque (Nm)	Output Torque (Nm)	Efficiency(%)	M.A.(±10%)
SGJ30	30:1	110	1000	30	9.1
SGJ50	50:1	100	1400	28	14.0
SGJ80	80:1	115	2500	27	21.7
SGJ70	70:1	200	4500	32	22.5
SGJ140	140:1	145	5600	28	38.6



SGJ series cast steel gearbox Dimensions

Model	ΦD	Valve Connection	Max Stem Diameter	B	t	h	H	C	E	F	G	J	K	L	ΦHW
SGJ30	Φ158	F10	Φ30	8	33.3	35	84	87.5	/	90.5	230	203	192	175.5	Φ300
	Φ158	F12	Φ30	8	33.3	46	95	98.5	/	90.5	230	203	192	175.5	Φ300
	Φ175	F14	Φ30	8	33.3	48.5	97.5	101	/	90.5	230	203	200.5	184	Φ300
SGJ50	Φ180	☆F10	Φ45	14	48.8	40.5	96	99.5	/	94.1	227.3	200.3	220	203.5	Φ300
	Φ180	F12	Φ45	14	48.8	40.5	96	99.5	/	94.1	227.3	200.3	220	203.5	Φ300
	Φ180	F14	Φ45	14	48.8	40.5	96	99.5	/	94.1	227.3	200.3	220	203.5	Φ300
SGJ80	Φ248	☆F12	Φ54	16	58.3	57	115	118.5	/	124	321	287	299	284	Φ400
	Φ248	F14	Φ54	16	58.3	57	115	118.5	/	124	321	287	299	284	Φ400
	Φ248	F16	Φ54	16	58.3	57.5	115.5	119	/	124	321	287	299	284	Φ400
SGJ70	Φ260	F16	Φ85	22	90.4	52	114.5	118	/	130	545	332	311	296	Φ705
	Φ300	F25	Φ85	22	90.4	63	125	128.5	/	150	545	332	331	316	Φ705
SGJ140	Φ260	F16	Φ85	22	90.4	52	114.5	118	195	130	418.7	332.7	321	296	Φ600
	Φ300	F25	Φ85	22	90.4	63	125	128.5	195	150	418.7	3332.7	341	316	Φ600

Note: 1. "☆" means that this flange cannot be machined flange spigot.
2. SGJ140 is a two-stage gearbox.