

SDQ Series

Buried Gearbox

Double worm gearbox. Changing the input direction of the handwheel, this product is very suitable for buried valves and part-turn valves such as ball valves, butterfly valves and plug valves.

Commonly used in water, petroleum, chemical and other industrial valve applications.

Torque range: 1500Nm~15000Nm

6 sizes. Ratios from:182:1 to 780:1

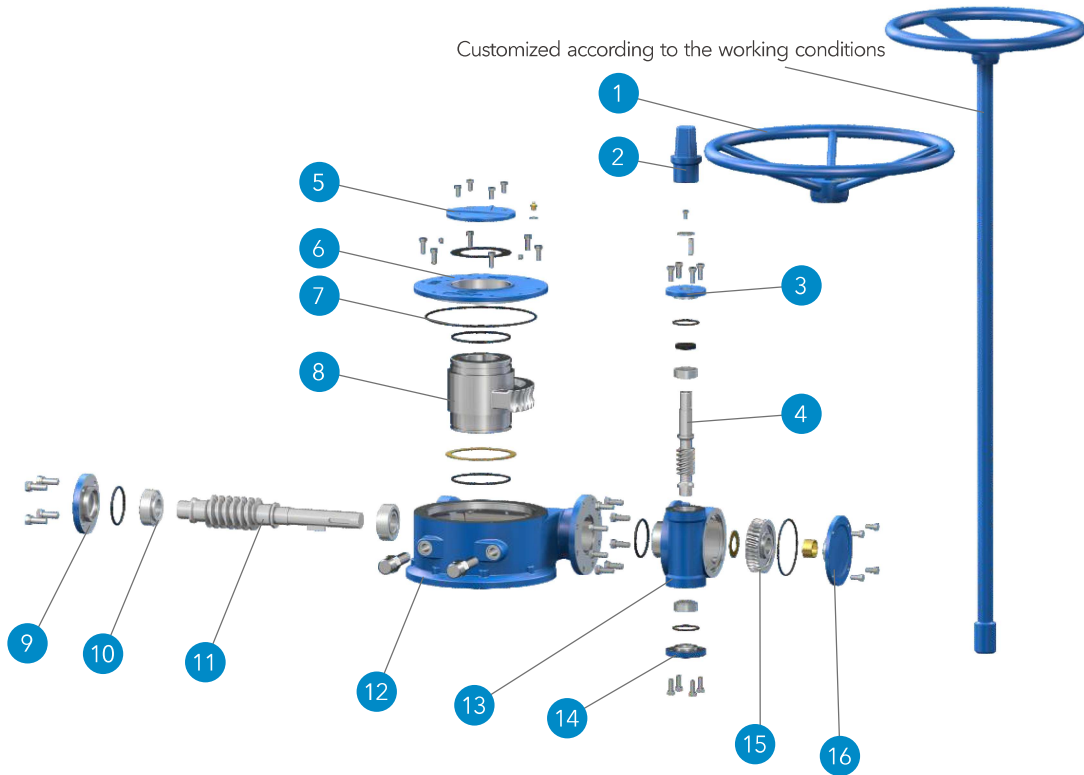


Features:

- Ductile cast iron housing
- Input orientation can be changed
- Robust design
- NBR seals
- Standard temperature range -20°C~120°C
- Travel: 0 - 90° (±5° adjustable)

Options:

- Stainless steel input shafts and fasteners
- IP68
- Extended input shaft
- Low temperature: -30°C
- High temperature: +200°C
- Bronze quadrant
- Buried application



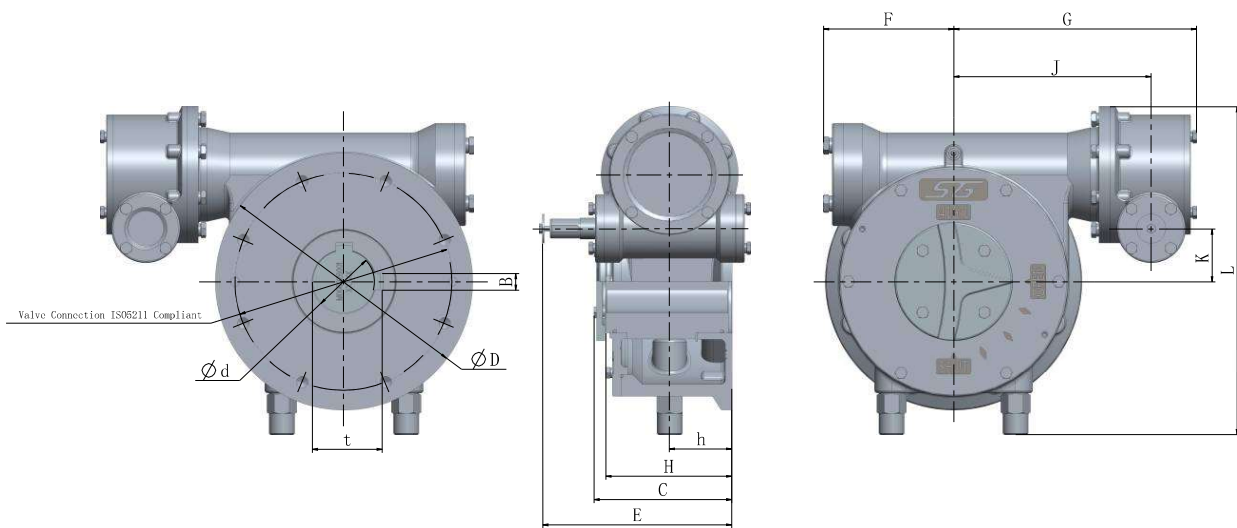
Material Specification

No.	Part name	Material				
		GB	ASTM/AWS	DIN	BS	ISO
1	Hand wheel	Q235A	A570 Gr.A	S235JR	S235JR	Fe 360A
2	Square Cap	QT450-10	65-45-12		420/12	450-10
3	Secondary Side Cover	QT450-10	65-45-12		420/12	450-10
4	Input shaft	45	1045		C45E 080M46	C45E4
5	Position Indicator	HT250	No.35 No.40	GG25	Grade 260	250
6	Coverplate	QT450-10	65-45-12		420/12	450-10
7	Seal			NBR		
8	Quadrant	QT500-7	88-55-06	GGG-50	500/7	500-7
9	Side Cover	QT450-10	65-45-12		420/12	450-10
10	Bearing			Tapered Roller Bearings		
11	Worm	45	1045	C45E CK45	C45E 080M46	C45E4
12	Body	QT450-10	65-45-12		420/12	450-10
13	Secondary Body	QT450-10	65-45-12		420/12	450-10
14	Secondary Side Cover	QT450-10	65-45-12		420/12	450-10
15	Secondary Quadrant	QT500-7	88-55-06	GGG-50	500/7	500-7
16	Secondary Coverplate	QT450-10	65-45-12		420/12	450-10

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%)
SDQ3	182:1	50	1500	16.5	30.0
SDQ4	272:1	60	2500	15.3	41.7
SDQ5	352:1	85	5000	16.7	58.8
SDQ6	416:1	115	7500	15.7	65.2
SDQ7	502:1	120	9500	15.8	79.2
SDQ8	780:1	115	15000	16.7	130.4



SDQ Buried Gearbox Dimensions

Model	ϕD	Valve Connection	Max Stem Diameter	B	t	h	H	C	E	F	G	J	K	L	P	ϕHW	$\square S1$	$\square S2$	T
SDQ3	$\phi 150$	F10	$\phi 38$	10	41.3	51.5	97	107.5	156.5	81.4	170.0	128.5	23	189	64	$\phi 300$	$\square 32$	$\square 38$	60
	$\phi 150$	F12	$\phi 38$	10	41.3	51.5	97	107.5	156.5	81.4	170.0	128.5	23	189	64	$\phi 300$	$\square 32$	$\square 38$	60
SDQ4	$\phi 175$	$\star F10$	$\phi 45$	14	48.8	51.5	102	112.5	168.5	89	188	143.8	23.5	222	64	$\phi 300$	$\square 32$	$\square 38$	60
	$\phi 175$	F12	$\phi 45$	14	48.8	51.5	102	112.5	168.5	89	188	143.8	23.5	222	64	$\phi 300$	$\square 32$	$\square 38$	60
	$\phi 175$	F14	$\phi 45$	14	48.8	51.5	102	112.5	168.5	89	188	143.8	23.5	222	64	$\phi 300$	$\square 32$	$\square 38$	60
SDQ5	$\phi 210$	$\star F10$	$\phi 60$	18	64.4	71	136	147	214	152.6	267.4	214	47	354	64	$\phi 350$	$\square 32$	$\square 38$	60
	$\phi 210$	$\star F12$	$\phi 60$	18	64.4	71	136	147	214	152.6	267.4	214	47	354	64	$\phi 350$	$\square 32$	$\square 38$	60
	$\phi 210$	F14	$\phi 60$	18	64.4	71	136	147	214	152.6	267.4	214	47	354	64	$\phi 350$	$\square 32$	$\square 38$	60
	$\phi 210$	F16	$\phi 60$	18	64.4	71	136	147	214	152.6	267.4	214	47	354	64	$\phi 350$	$\square 32$	$\square 38$	60
SDQ6	$\phi 300$	F16	$\phi 85$	22	90.4	73	147.5	161.3	221.5	152.6	284.4	231	62	384	111	$\phi 500$	$\square 32$	$\square 38$	60
	$\phi 300$	F25	$\phi 85$	22	90.4	73	147.5	161.3	221.5	152.6	284.4	231	62	384	111	$\phi 500$	$\square 32$	$\square 38$	60
SDQ7	$\phi 300$	F16	$\phi 110$	28	116.4	76	153	169.5	234	171.1	324	262.5	82	439	106	$\phi 500$	$\square 32$	$\square 38$	60
	$\phi 300$	F25	$\phi 110$	28	116.4	76	153	169.5	234	171.1	324	262.5	82	439	106	$\phi 500$	$\square 32$	$\square 38$	60
SDQ8	$\phi 350$	F30	$\phi 135$	36	151.8	83	172	186.3	244.8	201	359.4	291.5	100.5	508.5	128	$\phi 600$	$\square 32$	$\square 38$	60
	$\phi 350$	F30	$\phi 135$	36	151.8	83	172	186.3	244.8	201	359.4	291.5	100.5	508.5	128	$\phi 600$	$\square 32$	$\square 38$	60
	$\phi 415$	F35	$\phi 135$	36	151.8	99	188	202.3	261	201	359.4	291.5	100.5	510.5	128	$\phi 600$	$\square 32$	$\square 38$	60