

SB series

Multi-turn gear operators

This gear operator series is made of cast steel and the optional material is HT. Bronze, D2 and QT nuts are available to fit in with the valve stem. This series is suitable for use on linear-motion valves including gate valves and globe valves.

With the single-stage speed ratio varying from 2.3:1 to 8:1 and the torque from 216NM to 6800NM.



Main Components List

Part name	Material
Hand wheel	Q235A GB/T700-2006
End cover	WCB GB/ T12229-2005
Gear shaft	40Cr GB/T3077-1999
Protection device	Q235A/T700-2006
Driving nut	ZCuSn10Zn2 GB/T1176-1987
Housing	WCB GB/ T12229-2005
Big gear wheel	ZG270-500 GB/T5676-1985
Drive Sleeve	ZG270-500 GB/T5676-1985
Big cover	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 drive nut. Tighten the flange bolt. The valve can be closed by turning the hand-wheel clockwise and opened by turning the hand-wheel counterclockwise.

Product Features

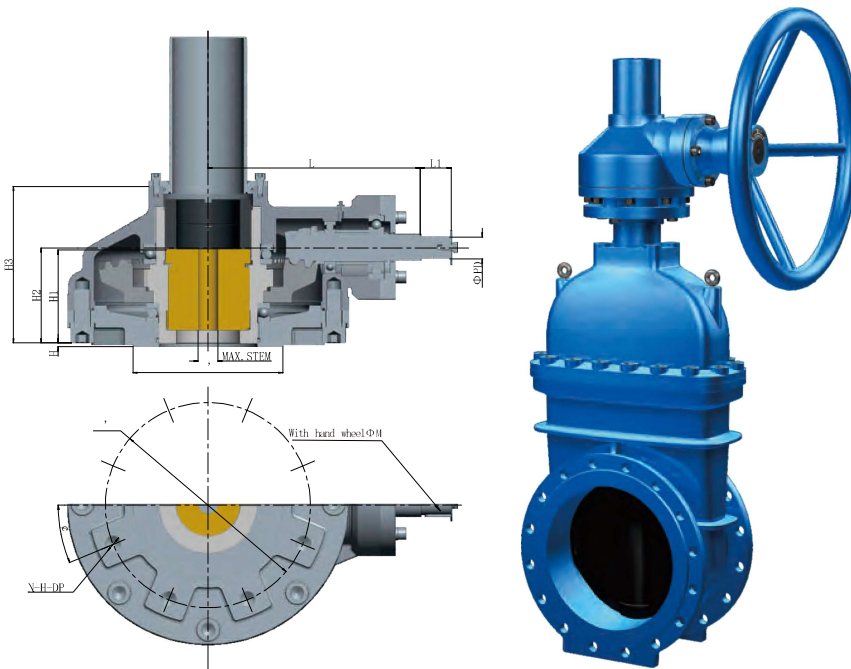
- 1, WCB casing
- 2, Welded hand-wheel
- 3, IP67 grade protection
- 4, Bronze nut
- 5, NBR sealing materials
- 6, Suitable for -20°C ~ 120°C working conditions

Customization

- 1, IP68 grade protection
- 2, Aluminum-bronze worm gear
- 3, Stainless steel input shaft
- 4, Designed with a lock mechanism

Main Technical Parameter

Model	Ratio	Thrust Rating Max		Input Torque		Output Torque		Mech.Adv Weight (±10%)	kg
		Kg	N	Kg-m	N-m	Kg-m	N-m		
SBS10	2.3:1	7061	69200	11	106	23	220	2.1	12
SBS20	2.35:1	11020	108000	18	172	37	365	2.1	15
SB-0	2.6:1	11735	115000	26	252	60	590	2.4	20
SB-1	3.6:1	12245	120000	30	290	95	930	3.2	32
SB-2	4:1	22000	220000	42	414	152	1490	3.6	38
SB-3	4.1:1	26020	255000	55	542	204	2000	3.7	52
SB-4	5.2:1	27040	265000	73	723	347	3400	4.7	98
SB-5	6.3:1	46122	452000	83	810	470	4600	5.7	245
SB-6	7.11:1	83675	820000	99	970	632	6200	6.4	310



Main Technical Parameter

Model	Flange outer diameter	ΦD2	ISO 5210			H1	H2	H3	MAX.STEM		L (Player wheel diameter)	ΦM	L1
			ΦD1	N-H	H				TW	KEY			
SBS10	134	102(F10)	70	4-M10	3	43.5	71	115	25	23	120	250(300)	34
SBS20	156	125(F12)	85	M12	3.5	57	78	125	32	30	216	300(400)	34
SB-0	172	140(F14)	100	M16	3	59.5	79	125	40	35	230	400(500)	34
SB-1	205	165(F16)	130	M20	4.5	72	83	130	45	43	256	500	34
SB-2	240	205(F20)	140	M16	3	82	109	164	48	45	212	630	53
SB-3	285	254(F25)	200	M16	5	82	102	164	65	60	250	710	53
SB-4	348	298(F30)	230	M20	4	111	141	220	70	65	304	800	55
SB-5	415	356(F35)	260	M30	3	163.5	167	274	105	95	356	900	55
SB-6	475	406(F40)	300	M36	8	176	186	310	120	110	400	900	55