

Gear Operators

Gear operators can be used for on/off and throttling control of Center Line resilient seated butterfly valves. All models are weatherproof and usable for above ground or buried service. For manual operation of valves, gear operators are required for valves 14" and larger and are recommended for valves 8" and larger.

Features

Gear operators from Center Line are 90° manual actuators, and they come with a handwheel, chainwheel, or square nut input device. The durable housing completely encloses the worm gear (on the input shaft) and the segment gear (on the output). Adjustable stops are standard and factory set when installed at the factory. Fully adjustable memory stops are available as an option. A position indicator is standard on all models for above ground service. An optional version is available for buried service applications. Contact customer service for more information.



Specifications

Operation Handwheel or chainwheel (12" standard, others available) or 2" square nut. Input shaft extension available.

Mounting Available with bolt patterns and bore/keyway for direct mount to all 2" through 30" Center Line resilient seated butterfly valves. Dual bolt patterns accommodate different pad designs. Gears are drilled for ISO pattern through 24". Contact factory for 30" and above.

Dimensions and Weights

Valve Size		Oper.	A	A1	C	E	F	G	H	Ø1	J	ØK	M	D	P	Q	Ø	ØD2	Ø3	Wt. (Kg.)
2-6	in.	XJ30	12.56	9.52	10.72	2.52	14.80	2.36	6.00	0.76	1.36	0.24	1.66	3.68	3.36	7.06	12.00	6.08	1.52	27.1
50-150	mm		314.00	238.00	268.00	63.00	37.00	59.00	150.00	19.00	34.00	6.00	41.50	92.00	84.00	176.50	300.00	152.00	38.00	(12.3)
8-14	in.	XJ50	12.28	9.04	10.60	3.12	1.54	2.74	5.12	0.76	1.36	0.24	1.53	5.60	3.36	7.90	12.00	6.48	1.52	31.7
200-350	mm		307.00	226.00	265.00	78.00	38.50	68.50	128.00	19.00	34.00	6.00	38.20	140.00	84.00	197.50	300.00	162.00	38.00	(14.4)
16-18	in.	XJ80	16.28	11.08	13.76	4.80	1.60	4.08	5.60	1.00	1.36	0.32	2.28	7.88	5.00	11.60	18.00	10.40	2.00	77.4
400-450	mm		407.00	277.00	344.00	120.00	40.00	102.00	140.00	25.00	34.00	8.00	57.00	197.00	125.00	290.00	450.00	260.00	50.00	(35.2)
Valve Size		Oper.	A	B	C	D	E	F	Ø	Ø1	Ø2	Wt. (Kg.)								
20	in.	XJ300	7.40	6.40	4.40	18.90	4.60	2.50	18.00	0.98	0.32	121.0								
500	mm		185.00	160.00	110.00	473.00	115.00	63.00	450.00	25.00	8.00	(55.0)								
24	in.	XJ300	7.40	6.40	5.00	20.00	4.80	2.50	18.00	0.98	0.32	132.0								
600	mm		185.00	160.00	125.00	500.00	120.00	63.00	450.00	25.00	8.00	(60.0)								
28	in.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A								
700	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A								
30	in.	DG 50	10.60	6.60	6.40	21.80	5.12	3.12	18.00	0.98	0.32	198.0								
750	mm	202	265.00	165.00	160.00	545.00	128.00	78.00	450.00	25.00	8.00	(90.0)								
32	in.	3D-60	9.72	6.92	6.48	21.20	6.56	3.52	17.40	0.98	0.32	292.6								
800	mm	800	243.00	173.00	162.00	530.00	164.00	88.00	435.00	25.00	8.00	(133.0)								
36	in.	DG 160	11.12	8.04	7.84	21.44	10.32	5.04	17.40	0.98	0.32	424.6								
900	mm	466	278.00	201.00	196.00	611.00	258.00	126.00	435.00	25.00	8.00	(193.0)								
40	in.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A								
1000	mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A								
42	in.	DG 160	16.72	10.20	9.60	25.56	12.40	5.04	17.40	0.98	0.32	792.0								
1050	mm	466	418.00	255.00	240.00	611.00	310.00	126.00	435.00	25.00	8.00	(360.0)								
48	in.	DG 160	16.72	10.20	9.60	25.56	12.40	5.04	17.40	0.98	0.32	792.0								
1200	mm	466	418.00	255.00	240.00	639.00	310.00	126.00	435.00	25.00	8.00	(360.0)								

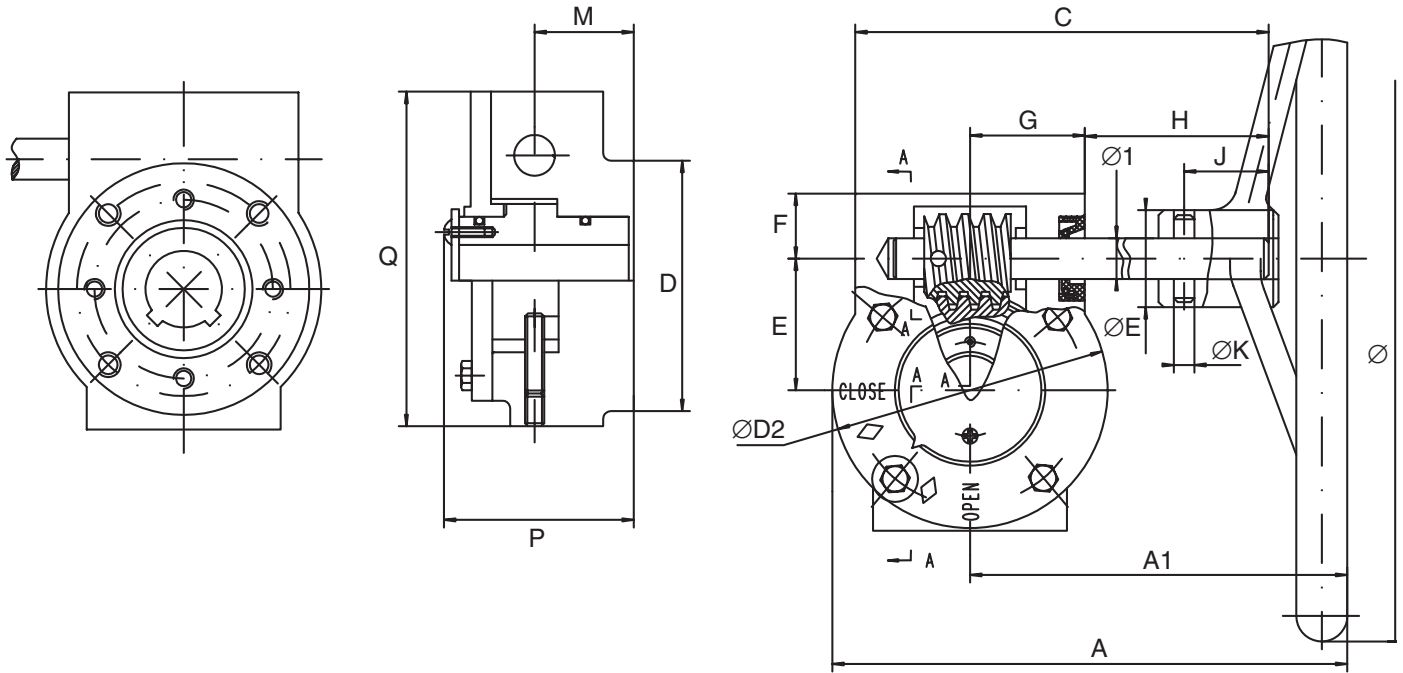
Some sizes Series 200 and 225/250 require different operators, please consult factory.

Resilient Seated Butterfly Valves

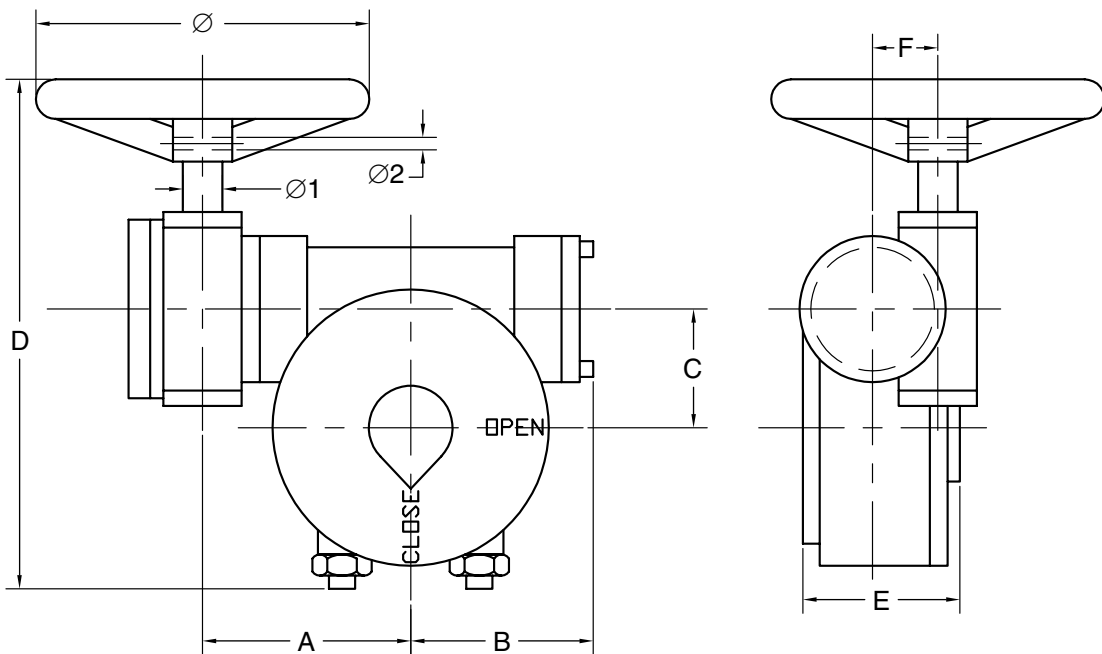


Gear Operators

XJ30-50-80

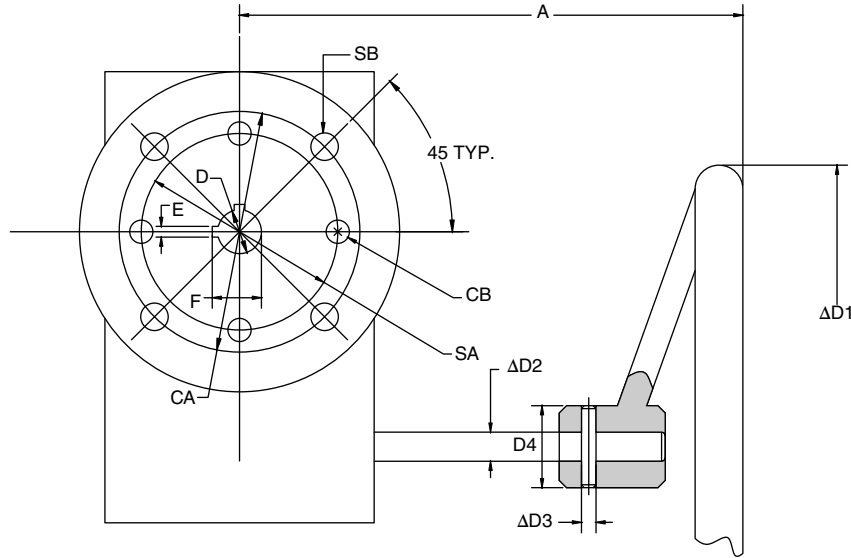


XJ300-BA800-3D-60-3D-120



Gear Operators

Gear Operator Drilling Patterns



Dimensions

Valve Size	Operator Model	CA	CB	SA	SB	D	D1	D2	D3	D4	A	E	F
2 in. 50 mm	XJ30	2.25 57.15	M6-1	2.76 70.00	M8-1.25	0.50 12.70	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	9.37 238.00	0.13 3.18	0.56 14.30
3 in. 80 mm	XJ30	2.25 57.15	M6-1	2.76 70.00	M8-1.25	0.50 12.70	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	9.37 238.00	0.13 3.18	0.56 14.30
4 in. 100 mm	XJ30	2.75 69.85	M8-1.25	2.76 70.00	M8-1.25	0.63 15.90	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	9.37 238.00	0.13 3.18	0.72 18.30
5 in. 125 mm	XJ30	2.75 69.85	M8-1.25	2.76 70.00	M8-1.25	0.75 19.05	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	9.37 238.00	0.13 3.18	0.84 21.40
6 in. 150 mm	XJ30	2.75 69.85	M8-1.25	2.76 70.00	M8-1.25	0.75 19.05	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	9.37 238.00	0.13 3.18	0.84 21.40
8 in. 200 mm	XJ50	3.50 88.90	M12-1.75	4.02 102.00	M10-1.5	0.87 22.20	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	8.89 226.00	0.19 4.76	0.97 24.50
10 in. 250 mm	XJ50	3.50 88.90	M12-1.75	4.02 102.00	M10-1.5	1.13 28.60	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	8.89 226.00	0.25 6.35	1.25 31.80
12 in. 300 mm	XJ50	4.25 107.95	M12-1.75	4.02 102.00	M10-1.5	1.25 31.80	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	8.89 226.00	0.25 6.35	1.39 35.00
14 in. 350 mm	XJ50	4.25 107.95	M12-1.75	4.02 102.00	M10-1.5	1.25 31.80	11.81 300.00	0.75 19.00	0.24 6.00	1.50 38.00	8.89 226.00	0.25 6.35	1.39 35.00
16 in. 400 mm	XJ80	6.25 158.75	M18-2.5	6.50 165.00	M20-2.5	1.31 33.30	18.00 450.00	0.98 25.00	0.32 8.00	1.99 50.00	10.90 277.00	0.31 7.90	1.49 37.30
18 in. 450 mm	XJ80	6.25 158.75	M18-2.5	6.50 165.00	M20-2.5	1.50 38.10	18.00 450.00	0.98 25.00	0.32 8.00	1.99 50.00	10.90 277.00	0.38 9.53	1.69 42.80
18 in. 450 mm	XJ300	6.25 158.75	M18-2.5	6.50 165.00	M20-2.5	1.63 41.30	18.00 450.00	0.98 25.00	0.32 8.00	1.99 50.00	12.64 321.00	0.38 9.53	1.81 46.00
20 in. 500 mm	XJ300	6.25 158.75	M18-2.5	6.50 165.00	M20-2.5	1.63 41.30	18.00 450.00	0.98 25.00	0.32 8.00	1.99 50.00	12.64 321.00	0.38 9.53	1.81 46.00
24 in. 600 mm	XJ300	8.50 215.90	M20-2.5	6.50 165.00	M20-2.5	2.00 50.80	18.00 450.00	0.98 25.00	0.32 8.00	1.99 50.00	13.19 335.00	0.50 12.70	2.24 56.80
24 in. 600 mm	XJ300	8.50 215.90	M20-2.5	6.50 165.00	M20-2.5	2.00 50.80	18.00 450.00	0.98 25.00	0.32 8.00	1.99 50.00	13.19 335.00	0.50 12.70	2.24 56.80