

SIJIE INDUSTRIAL CO., LTD

Screw Jack, Bevel Gearbox Manufacturer

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SJC Series Worm Gear Cubic Screw Jack information

- 1: Model: SJC5, SJC10, SJC20, SJC50, SJC80, SJC100, SJC200, SJC300, SJC450.
- 2: Load Capacities From 5KN to 450KN As Standard.
- 3: Self Locking Trapezoidal Screw.
- 4: Translating Screw, Rotating Screw, Keyed Screw Configurations in Upright Or Inverted Mounting Orientation.
- 5: Top End: Top Plate, Clevis End, Threaded End, Plain End, Spherical hinge, Forked head.
- 6: Lifting, Lowering, Pushing, Pulling and Rolling Linear Motions
- 7: Individually Or Multiple Screw Jack Lift System Arrangements Are Available
- 8: Electric Driven, Manual Operated or Both Are Available
- 9: Anti-backlash Nut Device Available, Special Custom Design Available

SJC Series Worm Gear Cubic Screw Jack Picture:



SJC Series Worm Gear Cubic Screw Jack Applications:



SJC Series Worm Gear Cubic Screw Jack Specifications:

Jack Model	SJC5	SJC10	SJC20	SJC50	SJC80	SJC100	SJC200	SJC300	SJC450
Max. Lifting Force (KN)	5	10	20	50	80	100	200	300	450
Lift Screw Size(mm)	Tr18×4	Tr20×4	Tr30×6	Tr40×7	Tr50×8	Tr60×9	Tr80×12	Tr100×16	Tr120×16
Gear Ratio (H)	1/4	1/4	1/6	1/7	1/8	1/8	1/8.75	1/10.25	1/10.75
Travel length(mm) per full turn of worm Shaft (H)	1.0	1.0	1.0	1.0	1.0	1.125	1.371	1.56	1.49
Starting Efficiency % (H)	0.24	0.25	0.19	0.18	0.17	0.18	0.17	0.18	0.16
Working Efficiency % (H) at 1500rpm	0.34	0.35	0.33	0.32	0.31	0.33	0.33	0.33	0.30
Max. Permissible power (KW) With High Ratio	0.30	0.57	1.14	2.2	2.5	3	4	7	11.5
Gear Ratio (L)	1/16	1/16	1/24	1/28	1/32	1/32	1/35	1/41	1/43
Travel length(mm) per full turn of worm Shaft (L)	0.25	0.25	0.25	0.25	0.25	0.281	0.343	0.39	0.37
Starting Efficiency % (L)	0.16	0.16	0.12	0.11	0.10	0.11	0.11	0.12	0.10
Working Efficiency % (L) at 1500rpm	0.25	0.25	0.24	0.23	0.22	0.23	0.22	0.23	0.20
Max. Permissible power (KW) With Low Ratio	0.15	0.27	0.55	1.1	1.5	2.2	3.5	5.5	5.5
Jack Housing Materials	Nodular cast iron								
Weight without stroke (kg)	3.2	5	8.5	21.5	36	58	75	110	200
Weight of screw (kg), per 100mm stroke	0.36	0.50	0.75	1.52	2.44	3.02	4.5	6.8	9.0
Remarks: 1: H: high ratio, L: low ratio. 2: Max. Permissible power is under the conditions that ambient temperature 20 degree c , duty cycle 30%h . 3: Efficiency is under grease lubrication. 4: Working temperature is -20℃-+80℃. 5: Self-locking under static conditions.									

SJC5 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		5KN				4KN			
			H:1/4		L:1/16		H:1/4		L:1/16	
	H:1/6	L:1/24	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	2.34	0.34	0.80	0.12	1.87	0.27	0.64	0.09
900	15.0	3.7	2.49	0.23	0.83	0.08	1.99	0.19	0.66	0.06
700	11.7	2.9	2.57	0.19	0.90	0.07	2.05	0.15	0.72	0.05
500	8.3	2.1	2.74	0.14	0.95	0.05	2.20	0.11	0.76	0.04
300	5.0	1.2	2.84	0.09	1.05	0.03	2.27	0.07	0.84	0.03
100	1.7	0.4	3.06	0.03	1.17	0.01	2.45	0.03	0.94	0.01
50	0.8	0.2	3.18	0.02	1.24	0.01	2.55	0.01	0.99	0.1
			3KN				1KN			

Speed (rpm)	Lifting Speed (mm/s)		H:1/4		L:1/16		H:1/4		L:1/16	
	H:1/6	L:1/24	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	1.40	0.206	0.477	0.070	0.468	0.069	0.159	0.023
900	15.0	3.7	1.49	0.141	0.497	0.047	0.497	0.047	0.166	0.016
700	11.7	2.9	1.54	0.113	0.543	0.040	0.513	0.038	0.181	0.013
500	8.3	2.1	1.65	0.086	0.568	0.030	0.549	0.029	0.189	0.010
300	5.0	1.2	0.57	0.018	0.628	0.020	0.568	0.018	0.209	0.007
100	1.7	0.4	1.84	0.019	0.702	0.007	0.612	0.006	0.234	0.002
50	0.8	0.2	1.91	0.010	0.746	0.004	0.637	0.003	0.249	0.001

SJC10 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		10KN				8KN			
			H:1/4		L:1/16		H:1/4		L:1/16	
	H:1/4	L:1/16	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	4.55	0.67	1.59	0.23	3.64	0.53	1.27	0.19
900	15.0	3.7	4.82	0.45	1.66	0.16	3.86	0.36	1.33	0.12
700	11.7	2.9	4.97	0.36	1.73	0.13	3.98	0.29	1.38	0.10
500	8.3	2.1	5.13	0.27	1.89	0.10	4.11	0.22	1.52	0.08
300	5.0	1.2	5.49	0.17	1.99	0.06	4.39	0.14	1.59	0.05
100	1.7	0.4	5.90	0.06	2.21	0.02	4.72	0.05	1.77	0.02
50	0.8	0.2	6.37	0.03	2.49	0.01	5.09	0.03	1.99	0.01
Speed (rpm)	Lifting Speed (mm/s)		5KN				2KN			
			H:1/4		L:1/16		H:1/4		L:1/16	
	H:1/6	L:1/24	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	2.27	0.333	0.796	0.117	0.910	0.133	0.318	0.047
900	15.0	3.7	2.41	0.227	0.829	0.078	0.965	0.091	0.332	0.031
700	11.7	2.9	2.49	0.182	0.865	0.063	0.995	0.073	0.346	0.025
500	8.3	2.1	2.57	0.134	0.947	0.050	1.027	0.054	0.379	0.020
300	5.0	1.2	2.74	0.0086	0.995	0.031	1.098	0.034	0.398	0.012
100	1.7	0.4	2.95	0.031	1.105	0.012	1.179	0.012	0.442	0.005
50	0.8	0.2	3.18	0.017	1.243	0.007	1.273	0.007	0.497	0.003

SJC20 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		20KN				15KN			
			H:1/6		L:1/24		H:1/6		L:1/24	
	H:1/6	L:1/24	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	9.65	1.41	3.32	0.49	7.23	1.06	2.49	0.36
900	15.0	3.7	10.27	0.97	3.62	0.34	7.70	0.73	2.71	0.26
700	11.7	2.9	10.61	0.78	3.98	0.29	7.96	0.58	2.98	0.22
500	8.3	2.1	11.37	0.60	4.19	0.22	8.53	0.45	3.14	0.16
300	5.0	1.2	11.79	0.37	4.42	0.14	8.84	0.28	3.32	0.10
100	1.7	0.4	12.73	0.13	4.97	0.05	9.55	0.10	3.73	0.04
50	0.8	0.2	12.73	0.07	6.63	0.03	9.55	0.05	4.97	0.03
			10KN				5KN			

Speed (rpm)	Lifting Speed (mm/s)		H:1/6		L:1/24		H:1/6		L:1/24	
	H:1/6	L:1/24	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	4.82	0.707	1.658	0.243	2.412	0.354	0.829	0.122
900	15.0	3.7	5.13	0.484	1.809	0.170	2.567	0.242	0.094	0.085
700	11.7	2.9	5.31	0.389	1.990	0.146	2.653	0.194	0.995	0.073
500	8.3	2.1	5.68	0.298	2.094	0.110	2.842	0.149	1.047	0.055
300	5.0	1.2	5.90	0.185	2.211	0.069	2.948	0.093	1.105	0.035
100	1.7	0.4	6.37	0.067	2.487	0.026	3.183	0.033	1.243	0.013
50	0.8	0.2	6.37	0.033	3.316	0.017	3.183	0.017	1.685	0.009

SJC50 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		50KN				35KN			
			H:1/7		L:1/28		H:1/7		L:1/28	
	H:1/4	L:1/16	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	24.87	3.65	8.65	1.27	17.41	2.55	6.06	0.89
900	15.0	3.7	27.44	2.59	9.04	0.85	19.21	1.81	6.33	0.60
700	11.7	2.9	28.42	2.08	9.47	0.69	19.90	1.46	6.63	0.49
500	8.3	2.1	29.48	1.54	10.47	0.55	20.63	1.08	7.33	0.38
300	5.0	1.2	31.83	1.00	11.70	0.37	22.82	0.70	8.19	0.26
100	1.7	0.4	34.60	0.36	13.26	0.14	24.22	0.25	9.28	0.10
50	0.8	0.2	36.17	0.19	18.09	0.09	25.32	0.13	12.66	0.07
Speed (rpm)	Lifting Speed (mm/s)		25KN				10KN			
			H:1/7		L:1/28		H:1/7		L:1/28	
	H:1/6	L:1/24	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	12.43	1.823	4.325	0.634	4.974	0.729	1.730	0.254
900	15.0	3.7	13.72	1.293	4.522	0.426	5.489	0.517	1.809	0.170
700	11.7	2.9	14.21	1.042	4.737	0.347	5.685	0.417	1.895	0.139
500	8.3	2.1	14.74	0.772	5.236	0.274	5.895	0.309	2.094	0.110
300	5.0	1.2	15.92	0.500	5.852	0.184	6.367	0.200	2.341	0.074
100	1.7	0.4	17.30	0.181	6.632	0.069	6.920	0.072	2.653	0.028
50	0.8	0.2	18.09	0.095	9.044	0.047	7.235	0.038	3.617	0.019

SJC80 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		80KN				60KN			
			H:1/8		L:1/32		H:1/8		L:1/32	
	H:1/8	L:1/32	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	41.08	6.02	14.47	2.21	30.81	4.52	10.85	1.59
900	15.0	3.7	43.91	4.14	15.16	1.43	32.93	3.10	11.37	1.07
700	11.7	2.9	45.48	3.33	15.92	1.17	34.11	2.50	11.94	0.87
500	8.3	2.1	48.97	2.56	16.75	0.88	36.73	1.92	12.57	0.66
300	5.0	1.2	53.06	1.67	17.69	0.56	39.79	1.25	13.26	0.42
100	1.7	0.4	57.88	0.61	19.90	0.21	43.41	0.45	14.92	0.16
50	0.8	0.2	60.63	0.32	21.22	0.11	45.48	0.24	15.92	0.08
			40KN				20KN			

Speed (rpm)	Lifting Speed (mm/s)		H:1/8		L:1/32		H:1/8		L:1/32	
	H:1/6	L:1/24	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	23.3	5.8	20.54	3.001	7.235	1.061	10.269	1.505	3.617	0.530
900	15.0	3.7	21.95	2.069	7.579	0.714	10.977	1.034	3.790	0.357
700	11.7	2.9	22.74	1.667	7.958	0.583	11.369	0.833	3.979	0.292
500	8.3	2.1	24.49	1.282	8.377	0.439	12.244	0.641	4.189	0.219
300	5.0	1.2	26.53	0.833	8.843	0.278	13.264	0.417	4.421	0.139
100	1.7	0.4	28.94	0.303	9.948	0.104	14.470	0.152	4.974	0.052
50	0.8	0.2	30.32	0.159	10.611	0.056	15.159	0.079	5.306	0.028

SJC100 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		100KN				80KN			
			H:1/8		L:1/32		H:1/8		L:1/32	
	H:1/8	L:1/32	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	26.2	6.6	54.26	7.95	19.46	2.85	43.41	6.36	15.57	2.28
900	16.9	4.2	57.76	5.44	21.32	2.01	46.21	4.35	17.05	1.61
700	13.1	3.3	59.69	4.37	23.56	1.73	47.75	3.50	18.85	1.38
500	9.4	2.3	63.95	3.35	24.87	1.30	51.16	2.68	19.90	1.04
300	5.6	1.4	68.87	2.16	27.98	0.88	55.10	1.73	22.38	0.70
100	1.9	0.5	74.61	0.78	31.98	0.33	59.69	0.62	25.58	0.27
50	0.9	0.2	77.85	0.41	34.44	0.18	62.28	0.33	27.55	0.14
Speed (rpm)	Lifting Speed (mm/s)		50KN				20KN			
			H:1/8		L:1/32		H:1/8		L:1/32	
	H:1/8	L:1/32	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	26.2	6.6	27.13	3.977	9.732	1.427	10.852	1.591	3.893	0.571
900	16.9	4.2	28.88	2.722	10.658	1.004	11.552	1.089	4.263	0.402
700	13.1	3.3	29.84	2.187	11.780	0.863	11.937	0.875	4.712	0.345
500	9.4	2.3	31.98	1.674	12.435	0.651	12.790	0.670	4.974	0.260
300	5.6	1.4	34.44	1.082	13.989	0.439	13.774	0.433	5.596	0.176
100	1.9	0.5	37.30	0.391	15.988	0.167	14.922	0.156	6.395	0.067
50	0.9	0.2	38.93	0.204	17.218	0.090	15.571	0.082	6.887	0.036

SJC200 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		200KN				150KN			
			H:1/8.75		L:1/35		H:1/8.75		L:1/35	
	H:1/8.75	L:1/35	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	32.0	8.0	132.25	19.39	49.59	7.27	99.19	14.54	37.20	5.45
900	20.6	5.1	145.48	13.71	54.55	5.14	109.11	10.28	40.92	3.86
700	16.0	4.0	155.87	11.42	57.46	4.21	116.90	8.57	43.07	3.16
500	11.4	2.9	161.64	8.46	60.62	3.17	121.23	6.35	45.46	2.38
300	6.9	1.7	174.57	5.48	68.19	2.14	130.93	4.11	51.14	1.61
100	2.3	0.6	198.38	2.08	83.93	0.88	148.78	1.56	62.95	0.66
50	1.1	0.3	207.83	1.09	90.92	0.48	155.87	0.82	68.19	0.36
			100KN				50KN			

Speed (rpm)	Lifting Speed (mm/s)		H:1/8.75		L:1/35		H:1/8.75		L:1/35	
	H:1/8.75	L:1/35	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	32.0	8.0	66.13	9.694	24.797	3.635	33.063	4.847	12.399	1.818
900	20.6	5.1	72.74	6.855	27.277	2.571	36.370	3.427	13.639	1.258
700	16.0	4.0	77.93	5.712	28.713	2.105	38.967	2.856	14.356	1.052
500	11.4	2.9	80.82	4.231	30.308	1.587	40.411	2.116	15.154	0.793
300	6.9	1.7	87.29	2.742	34.096	1.071	43.643	1.371	17.048	0.536
100	2.3	0.6	99.19	1.039	41.965	0.439	49.595	0.519	20.982	0.220
50	1.1	0.3	103.19	0.544	45.462	0.238	51.957	0.272	22.731	0.119

SJC300 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		300KN				200KN			
			H:1/10.25		L:1/41		H:1/10.25		L:1/41	
	H:1/10.25	L:1/41	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	37.3	9.3	231.52	33.94	83.04	12.17	154.34	22.63	55.36	8.12
900	24.0	6.0	254.67	24.00	90.95	8.57	169.78	16.00	60.63	5.71
700	18.7	4.7	272.86	20.00	100.53	7.37	181.90	13.33	67.02	1.91
500	13.3	3.3	282.96	14.81	106.11	5.56	188.64	9.88	70.74	3.70
300	8.0	2.0	305.60	9.60	119.37	3.75	203.73	6.40	79.58	2.50
100	2.7	0.7	347.27	3.64	146.92	1.54	231.52	2.42	97.95	1.03
50	1.3	0.3	363.81	1.90	159.17	0.83	242.54	1.27	106.11	0.56
Speed (rpm)	Lifting Speed (mm/s)		150KN				100KN			
			H:1/10.25		L:1/41		H:1/10.25		L:1/41	
	H:1/10.25	L:1/41	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	37.3	9.3	115.76	16.97	41.52	6.09	77.17	11.31	27.68	4.06
900	24.0	6.0	127.33	12.00	45.48	4.29	84.89	8.00	30.32	2.86
700	18.7	4.7	136.43	10.00	50.26	3.68	90.95	6.67	33.51	2.46
500	13.3	3.3	141.48	7.41	53.06	2.78	94.32	4.94	35.37	1.85
300	8.0	2.0	152.80	4.8	59.69	1.88	101.88	3.20	39.79	1.25
100	2.7	0.7	173.64	1.82	73.46	0.77	115.76	1.21	48.97	0.51
50	1.3	0.3	181.90	0.95	79.58	0.42	121.27	0.64	53.06	0.28

SJC450 Screw Jack Lifting Load(KN)										
Speed (rpm)	Lifting Speed (mm/s)		450KN				350KN			
			H:1/10.25		L:1/41		H:1/10.25		L:1/41	
	H:1/10.25	L:1/41	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	34.7	8.68	355	52.1	133	19.5	276	40.5	104	15.2
900	22.3	5.58	381	35.9	148	14	296	27.9	115	10.9
700	17.4	4.34	410	30.1	157	11.5	319	23.4	122	8.94
500	12.4	3.1	444	23.3	167	8.72	345	18.1	130	6.78
300	7.44	1.86	485	15.2	190	5.98	377	11.8	148	4.65
100	2.48	0.62	561	5.87	222	2.33	436	4.57	173	1.81
50	1.24	0.31	666	3.49	266	1.4	518	2.71	207	1.09
			200KN				100KN			

Speed (rpm)	Lifting Speed (mm/s)		H:1/10.25		L:1/41		H:1/10.25		L:1/41	
	H:1/10.25	L:1/41	N.m	KW	N.m	KW	N.m	KW	N.m	KW
1400	34.7	8.68	158	23.2	59.2	8.68	79	11.6	29.6	4.34
900	22.3	5.58	169	15.9	65.8	6.2	84.6	7.97	32.9	3.1
700	17.4	4.34	182	13.4	69.7	5.11	91.1	6.68	34.8	2.55
500	12.4	3.1	197	10.3	74	3.88	98.7	5.17	37	1.94
300	7.44	1.86	215	6.76	84.6	2.66	108	3.38	42.3	1.33
100	2.48	0.62	249	2.61	98.7	1.03	125	1.31	49.4	0.52
50	1.24	0.31	296	1.55	118	0.62	148	0.78	59.2	0.31

SJC Series Worm Gear Cubic Screw Jack Ordering Information

SJC300 - US - T - C - 1/41 - 300 - P
1 2 3 4 5 6 7

1: Jack Model

SJC5, SJC10, SJC20, SJC50, SJC80, SJC100, SJC200, SJC300, SJC450

2: Screw Configuration & Mounting Orientation

US: Upright translating screw

UK: Upright keyed screw

UR: Upright rotating screw

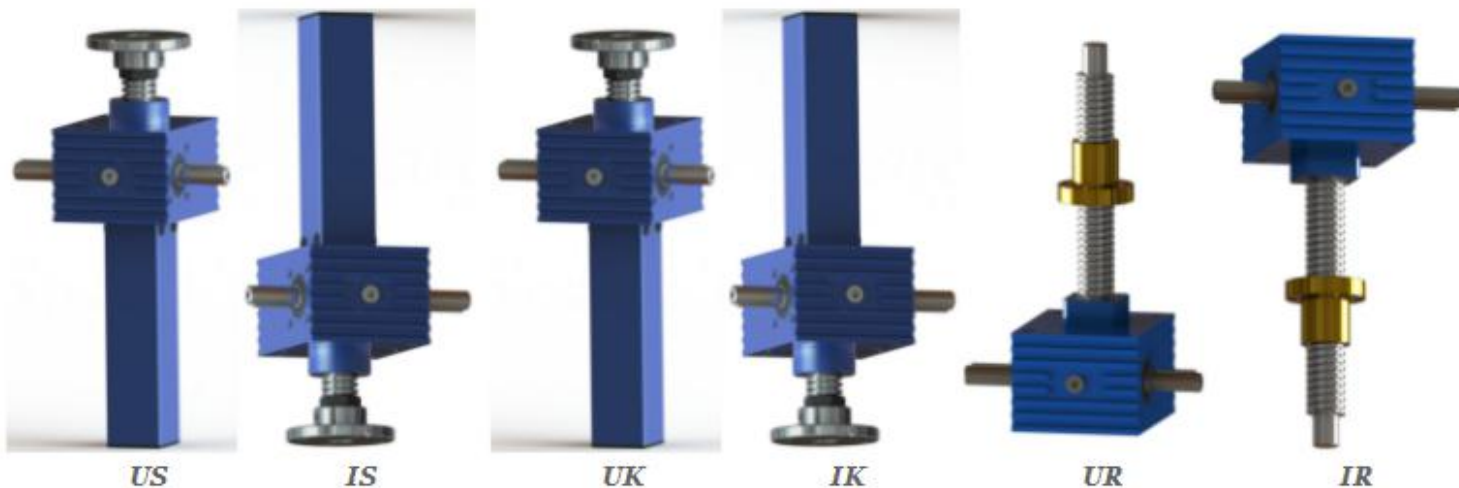
IS: Inverted translating screw

IK: Inverted keyed screw

IR: Inverted rotating screw

Note: US, IS (Screw rotation, do axial motion) UK, IK (Screw anti-rotation, do axial motion)

UR,IR(Screw fixed rotation, traveling nut do axial motion)



3: Screw Top End

					
Top plate	Clevis end	Thread end	Plain end	Spherical hinge	Forked head

4: Worm Shaft Input Types

A: left side worm shaft input.

B: right side worm shaft input.

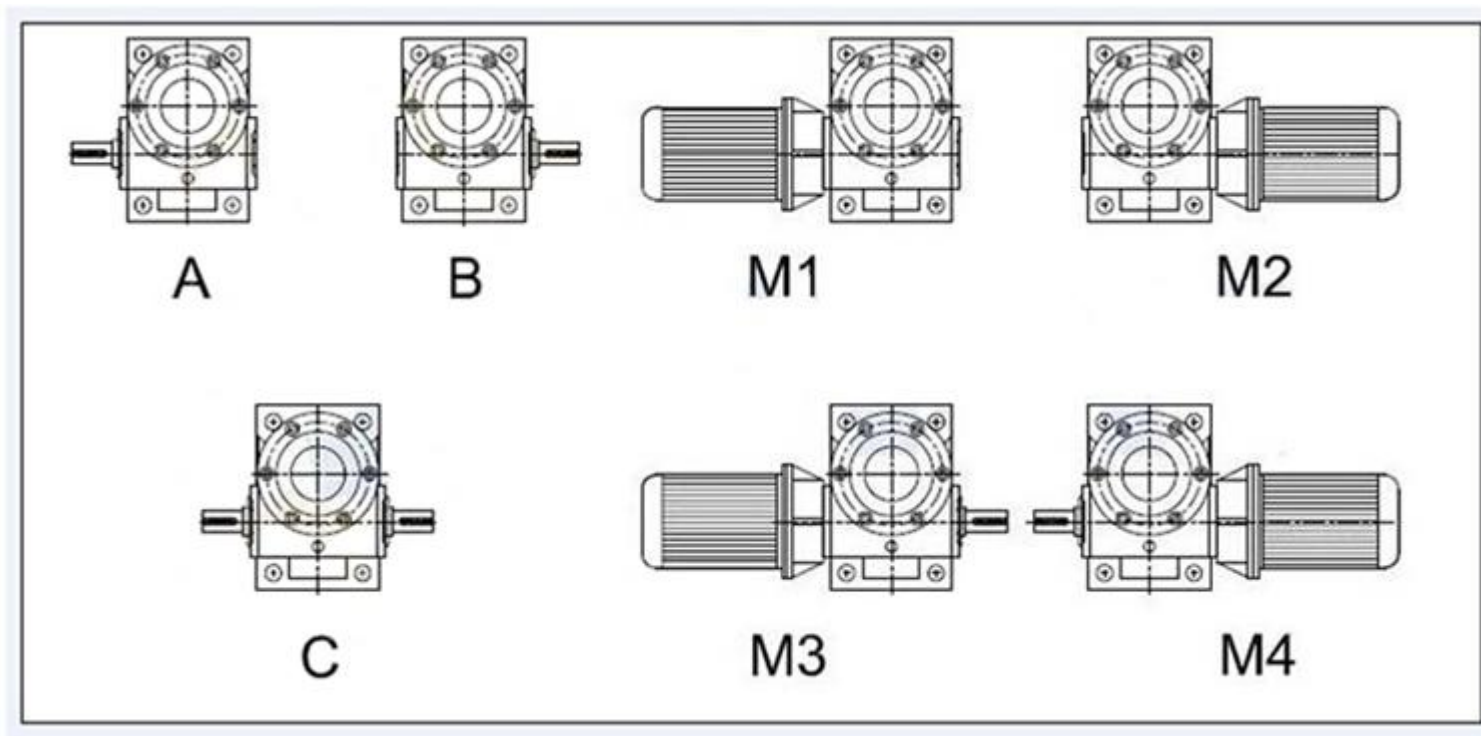
C: double worm shaft input.

M1: left side motor flange direct input.

M2: right side motor flange direct input.

M3: left side motor flange direct input, right side worm shaft input.

M4: right side motor flange direct input, left side worm shaft input.



5: Gear Ratio:

SJC5: 1/4, 1/16.

SJC10: 1/4, 1/16.

SJC20: 1/6, 1/24.

SJC50: 1/7, 1/28.

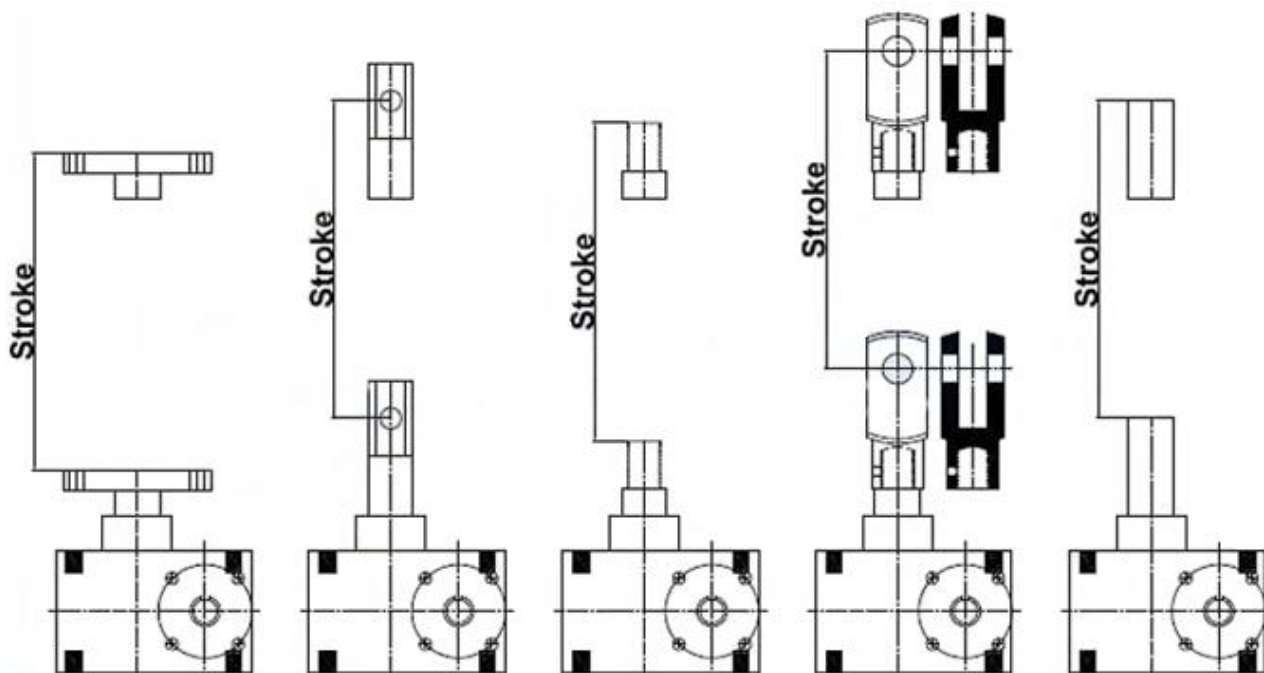
SJC80: 1/8, 1/32.

SJC100: 1/8, 1/32

SJC200: 1/8.75, 1/35.

SJC300: 1/10.25, 1/41

6: Travel Stroke



7: Accessories

N: Standard Jack, No additional accessories

P: Protective Tube

R: Dust Cover

Y: Hand Wheel

Other accessories, please check below picture



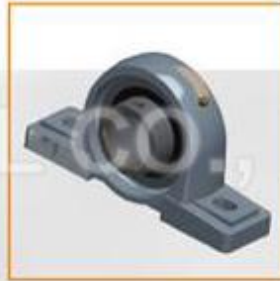
Couplings



Hand Wheel



Motor Flange



Pillow block bearing



Mounting base



Mounting brackets



Safety nuts



Connecting shafts



Dust cover



Spiral dust cover



Articulated protective tube



Reducer



Electric Motor



Proximity limit switch



Encoder



Pull limit switch



Grating ruler



Electromagnetic clutch



Digital display controller



Automatic oiler