

Standard performances screw jacks series

- Load capacity ranging from 5 kN to 200 kN
- Linear speed up to 40 mm/s (up to 100 mm/s on request)
- Input speed up to 1500 r/min
- Operating duty cycle up to 30% over a 10 minute period, or 20% over a 1 hour period, at 25°C environment temperature



SJ Series Screw Jacks - Technical Specification

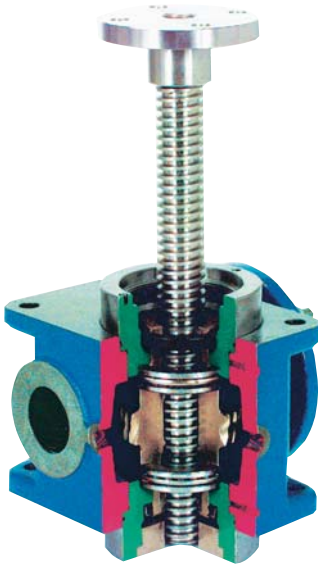
SIZE		SJ 5	SJ 10	SJ 25	SJ 50	SJ 80	SJ 200	
Max lifting load	kN	5	10	25	50	80	200	
Acme lift screw	dia × pitch	Tr 18 × 4	Tr 22 × 5	Tr 30 × 6	Tr 40 × 7	Tr 55 × 9	Tr 70 × 12	Tr 80 × 12
Available ratios	RH	1 : 4	–	–	–	–	–	
	RV	1 : 6.25	1 : 4	1 : 6	1 : 7	1 : 7	1 : 7	
	RN	1 : 12.5	1 : 16	1 : 18	1 : 14	1 : 14	–	
	RL	1 : 25	1 : 24	1 : 24	1 : 28	1 : 28	1 : 28	
Stroke [mm] for 1 input turn	RH	1	–	–	–	–	–	
	RV	0.64	1.25	1	1	1.28	1.71	
	RN	0.32	0.31	0.33	0.5	0.64	–	
	RL	0.16	0.21	0.25	0.25	0.32	0.43	
Max permissible operating power [kW] (*)	RH	0.40	–	–	–	–	–	
	RV	0.40	0.60	1.2	2.4	2.5	4	
	RN	0.20	0.30	0.7	1.7	1.8	–	
	RL	0.17	0.25	0.6	1.2	1.2	3.2	
Max starting torque required at full load [Nm]	RH	3.8	–	–	–	–	–	–
	RV	2.5	9	19.9	44.1	77	325	360
	RN	1.7	3.5	8.3	24.8	47	–	–
	RL	1	2.5	7.6	18	34	125	138
Starting efficiency	RH	0.25	–	–	–	–	–	–
	RV	0.25	0.26	0.20	0.18	0.18	0.19	0.17
	RN	0.21	0.20	0.16	0.15	0.15	–	–
	RL	0.16	0.16	0.13	0.11	0.11	0.12	0.11
Running efficiency at 1500 r/min	RH	0.35	–	–	–	–	–	–
	RV	0.34	0.36	0.34	0.32	0.33	0.36	0.35
	RN	0.29	0.28	0.27	0.28	0.29	–	–
	RL	0.25	0.25	0.25	0.23	0.24	0.25	0.24
Reactive torque of screw at max load [Nm]		8	20	65	165	368	1180	1300
Housing material		Aluminium alloy EN 1706 - AC-AISI10Mg T6			Cast iron EN 1561 - GJL-250			
Weight without screw and protection tube [kg]		1.5	2.3	10.4	25	35	75	
Weight for every 100 mm of screw [kg]		0.16	0.23	0.45	0.8	1.6	2.5	3.4

(*) at 25°C ambient temperature and duty cycle 20% per hour

Efficiency figures at different input speed on page 13

MA Series Screw Jacks

Performance summary



High performances screw jacks series

- Load capacity ranging from 5 kN to 350 kN
- Linear speed up to 75mm/s (up to 150mm/s on request)
- Input speed up to 3000 r/min
- Operating duty cycle up to 40% over a 10 minute period, or 30% over a 1 hour period, at 25°C environment temperature
- High duty cycle up to 100% for continuous performances with ball screw option

MA Series Screw Jacks - Technical Specification

SIZE		MA 5	MA 10	MA 25	MA 50	MA 80	MA 100	MA 200	MA 350
Max lifting load	kN	5	10	25	50	80	100	200	350
Acme lift screw	dia × pitch	Tr 18 × 4	Tr 22 × 5	Tr 30 × 6	Tr 40 × 7	Tr 55 × 9	Tr 60 × 12	Tr 70 × 12	Tr 100 × 16
Ratio	RV	1 : 4	1 : 5	1 : 6	1 : 7	1 : 7	1 : 8	1 : 8	3 : 32
	RN	1 : 16	1 : 20	1 : 18	1 : 14	1 : 14	1 : 24	1 : 24	1 : 16
	RL	1 : 24	1 : 25	1 : 24	1 : 28	1 : 28	1 : 32	1 : 32	1 : 32
Stroke [mm] for 1 input turn	RV	1	1	1	1	1.28	1.5	1.5	1.5
	RN	0.25	0.25	0.333	0.5	0.64	0.5	0.5	1
	RL	0.166	0.20	0.25	0.25	0.32	0.375	0.375	0.5
Max permissible operating power [kW] (*)	RV	0.40	0.60	1.2	2.4	2.5	3	4.5	8
	RN	0.20	0.30	0.7	1.7	1.8	2.6	4	7
	RL	0.17	0.25	0.6	1.2	1.2	2.3	3.8	6.8
Max starting torque required at full load [Nm]	RV	3.8	7.2	19.9	44.1	77	120	282	525
	RN	1.2	2.6	8.3	24.8	47	62	133	400
	RL	1	2.3	7.6	18	34	50	109	280
Starting efficiency	RV	0.21	0.22	0.20	0.18	0.18	0.20	0.17	0.16
	RN	0.16	0.15	0.16	0.15	0.15	0.13	0.12	0.14
	RL	0.13	0.14	0.13	0.11	0.11	0.12	0.11	0.10
Running efficiency at 1500 r/min	RV	0.36	0.37	0.34	0.32	0.31	0.36	0.33	0.32
	RN	0.28	0.28	0.27	0.28	0.27	0.29	0.26	0.29
	RL	0.25	0.27	0.25	0.23	0.22	0.26	0.24	0.24
Reactive torque of screw at max load [Nm]		8	20	65	165	368	525	1180	2880
Housing material		Aluminium alloy EN 1706 - AC-AISi10Mg T6			Spheroidal graphite iron EN 1563 - GJS-500-7				
Weight without screw and protection tube [kg]		2.2	4.3	13	26	26	48	75	145
Weight for every 100 mm of screw [kg]		0.16	0.23	0.45	0.8	1.6	1.8	2.5	5.2

(*) at 25°C ambient temperature and duty cycle 20% per hour

Efficiency figures at different input speed on page 16