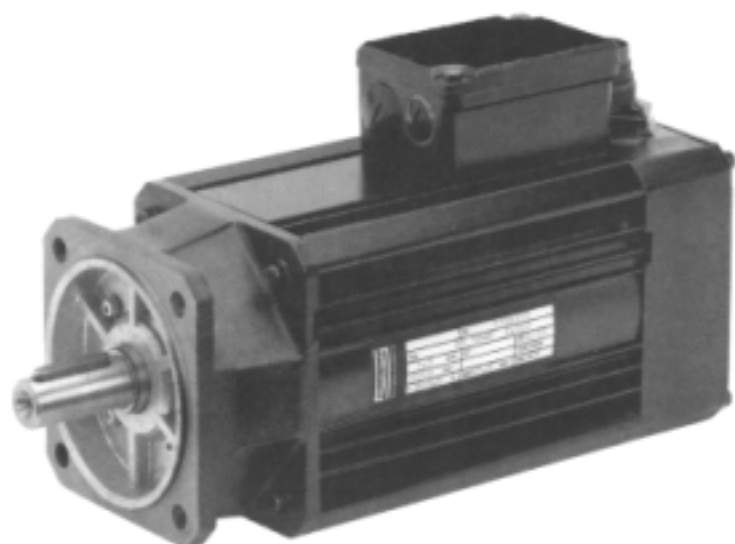

Synchronous Servo-Motors



The SM35/45/56/71/100 series of synchronous servomotors, in conjunction with SEIDEL amplifiers, have the excellent qualities typical of SEIDEL DC technology.

The rotor is fitted with NEODYM permanent magnets around its circumference. The six poles (SM35 : four poles) three-phase AC Y-connected winding is located in the stator.

The electronic commutator is located in the power inverter. As a result, there are no wear parts on the motor except for the ball bearings.

The feedback unit consists of a brushless tachometer generator with rotor position sensor.

Overload up to 4 times the nominal stall torque for a short time is allowed.

The motors with block commutation show the type designations SM.

Customers always expect short delivery times. To ease the storage of motors, some of the motor types have been defined as preferential types. The motors labelled with an asterix ("*") in the summary are preferential storage types and are available within four weeks.

The option of "radial shaft seal" and "built-in holding brake" is also available on preferential types. The following optional extras are also available at extra charge:

Options:

- 92- tropical isolation
- BV- external fan for boosting rated torque
- G- holding brake
- J- radial shaft seal
- 09- special flange / special shaft
- xx- several inkremental-sensor adaptors (e.g. ROD426)

For exact dimensions and detailed technical information, refer to the "Brushless synchronous servomotors" catalogue.

Motor type		Continuous stall torque M ₀ (Nm)	Moment of inertia J (kg cm ²)	Phase-current I ₀ (A)	Torque-constant K _t (Nm/A)	Voltage-constant K _e (V/1000min ⁻¹)	Weight m (kg)	Nominal speed n _N (U/min)
* SM 35S	-6.000	0,3	0,41	1,6	0,19	20	1,6	6000
* SM 35M	-6.000	0,6	0,73	2,8	0,21	22	2,35	6000
* SM 35L	-4.000	1,2	1,28	3,6	0,33	36,8	3,9	4000
* SM 45S	-3.000	0,85	1,5	2,3	0,43	45,0	4,9	3.000
SM 45S	-4.000	0,85	1,5	3,1	0,32	33,7	4,9	4.000
SM 45S	-6.000	0,85	1,5	4,1	0,24	25,1	4,9	6.000
* SM 45M	-3.000	1,7	2,1	3,7	0,49	51,1	5,9	3.000
SM 45M	-4.000	1,7	2,1	5,1	0,36	37,8	5,9	4.000
SM 45M	-6.000	1,7	2,1	7,0	0,26	27,4	5,9	6.000
* SM 45L	-3.000	3,2	3,4	6,1	0,55	57,2	6,9	3.000
SM 45L	-4.000	3,2	3,4	8,6	0,39	41,2	6,9	4.000
SM 45L	-6.000	3,2	3,4	12,0	0,28	29,4	6,9	6.000
* SM 56S	-2.000	3,8	4,9	4,9	0,809	84,7	6,6	2.000
* SM 56S	-3.000	3,8	4,9	7,3	0,504	56,5	6,6	3.000
SM 56S	-4.000	3,8	4,9	10,2	0,388	40,6	6,6	4.000
SM 56S	-6.000	3,8	4,9	15,0	0,265	27,7	6,6	6.000
* SM 56M	-2.000	7,0	8,7	8,5	0,843	88,3	8,5	2.000
* SM 56M	-3.000	7,0	8,7	13,0	0,555	58,1	8,5	3.000
SM 56M	-4.000	7,0	8,7	16,6	0,433	45,3	8,5	4.000
SM 56M	-6.000	7,0	8,7	27,0	0,266	27,9	8,5	6.000
SM 56L	-2.000	10,0	12,5	12,4	0,828	86,7	10,8	2.000
* SM 56L	-3.000	10,0	12,5	17,2	0,596	62,4	10,8	3.000
SM 56L	-4.000	10,0	12,5	23,0	0,447	46,8	10,8	4.000
SM 56L	-6.000	10,0	12,5	38,5	0,265	27,7	10,8	6.000
SM 71K	-2.000	10,5	17,5	13,4	0,797	83,5	12,2	2.000
* SM 71K	-3.000	10,5	17,5	20,0	0,535	56,0	12,2	3.000
SM 71K	-4.000	10,5	17,5	26,5	0,404	42,3	12,2	4.000
SM 71K	-6.000	10,5	17,5	39,5	0,272	28,5	12,2	6.000
SM 71S	-2.000	16,5	27,5	21,0	0,799	83,7	16,3	2.000
* SM 71S	-3.000	16,5	27,5	31,0	0,539	56,4	16,3	3.000
SM 71S	-4.000	16,5	27,5	39,0	0,430	45,0	16,3	4.000
SM 71S	-6.000	16,5	27,5	66,0	0,256	26,8	16,3	6.000
* SM 71M	-2.000	22,0	37,7	25,5	0,867	90,8	20,5	2.000
SM 71M	-3.000	22,0	37,7	38,0	0,585	61,3	20,5	3.000
SM 71M	-4.000	22,0	37,7	48,5	0,460	48,2	20,5	4.000
SM 71M	-6.000	22,0	37,7	82,0	0,273	28,6	20,5	6.000
SM 100K	-1.200	25,0	74,0	22,5	1,124	117,7	26,1	1.200
SM 100K	-2.000	25,0	74,0	39,0	0,650	68,1	26,1	2.000
* SM 100K	-3.000	25,0	74,0	52,0	0,486	50,9	26,1	3.000
SM 100K	-4.000	25,0	74,0	69,0	0,369	38,6	26,1	4.000
SM 100K	-6.000	25,0	74,0	92,0	0,275	28,8	26,1	6.000
SM 100S	-1.200	36,0	108,0	31,0	1,178	123,4	32,7	1.200
SM 100S	-2.000	36,0	108,0	50,0	0,725	75,9	32,7	2.000
* SM 100S	-3.000	36,0	108,0	71,0	0,515	53,9	32,7	3.000
SM 100S	-4.000	36,0	108,0	89,0	0,411	43,0	32,7	4.000
SM 100M	-1.200	46,0	141,0	39,0	1,195	125,1	39,6	1.200
SM 100M	-2.000	46,0	141,0	60,0	0,777	81,4	39,6	2.000
SM 100M	-3.000	46,0	141,0	85,0	0,545	57,1	39,6	3.000
SM 100M	-4.000	46,0	141,0	115,0	0,406	42,5	39,6	4.000
SM 100L	-1.200	57,0	175,0	44,0	1,317	137,9	48,8	1.200
SM 100L	-2.000	57,0	175,0	72,0	0,795	83,3	48,8	2.000
SM 100L	-3.000	57,0	175,0	114,0	0,506	53,0	48,8	3.000
SM 100LB	-1.200	66,0	210,0	51,0	1,301	136,2	53,4	1.200
SM 100LB	-2.000	66,0	210,0	82,0	0,815	85,3	53,4	2.000

* = preferential storage types